

# THE HEALTH REFORMER.

*Nature's Laws, God's Laws; Obey and Live.*

VOL. 12.

BATTLE CREEK, MICH., FEBRUARY, 1877.

NO. 2.

## Life Sketches.

### ELDER JOSEPH BATES.

ELDER JOSEPH BATES was born at Rochester, Mass., in the year 1792, and died at Battle Creek, Mich., in 1872, in the eightieth year of his age. During the earlier part of his remarkable life he followed the seas for the period of twenty-one years. And it was during his sea-faring life, while separated from the saving influences of the parental, Christian home, and exposed to the temptations of sailor life, that he became thoroughly impressed with moral and religious principles, and gathered strength to trample intemperance and all forms of vice beneath his feet, and rise in the strength of right and of God to the position of a thorough reformer, a devoted Christian, and an efficient minister of the gospel.

In our paper for January we left the hero of this brief narrative at Peru, South America, master of an American vessel, rejoicing in the victory he was gaining over smoking cigars and tobacco. He had been in the Pacific Ocean fourteen months, had sold his ship, closed his business, and had taken passage in the ship *Candace*, Capt. F. Burtody, for Boston, Mass. He says: "Captain B. and myself mutually agreed, when the *Candace* weighed her anchor, that we would from that hour cease chewing tobacco."

"Our good ship now lay by with her main topsail to the mast, until the boat came alongside from the commodore with our specie and silver, which Captain B. and myself had gained by trading. When this was all safe on board, all sail was made on the ship. It

was now night, and we were passing our last landmark (St. Lorenzo), and putting out for a long voyage of eight thousand and five hundred miles. The steward reported supper ready. 'Here goes my tobacco, Bates,' said Captain B., taking it from his mouth and casting it overboard. 'And here goes mine, too,' said I, and that was the last that ever polluted my lips. But Captain B. failed to overcome, and labored hard with me to keep him company. I was now free from all distilled spirits, wine, and tobacco. Step by step I had gained this victory—nature never required either. I never used the articles, except to keep company with my associates. How many millions have been ruined by such debasing and ruinous habits! How much more like a human being I felt when I had gained the mastery in these things and overcome them all.

"I was also making great efforts to conquer another sin, which I had learned of wicked sailors. That was the habit of using profane language. My father had been a praying man from the time I had any knowledge of him. My mother embraced religion when I was about twelve years old. I never dared, even after I was married, to speak irreverently of God in the presence of my father. As he had endeavored to train me in the way I should go, I knew the way; but the checked scenes of the previous sixteen years of my life had thrown me from the track, which I was endeavoring now to regain."

Captain Bates reached his Massachusetts home in February, 1824, and remained with his family and friends several months. During this time a new brig was launched, rigged, and fitted to his liking, named the *Empress*, of New Bedford, and in August he sailed for



Rio Janeiro, touching at Richmond, Va., to finish the ship-loading. On this passage his experience deepens, and he still advances in reform, as appears evident by the following statements from his pen :—

“From the time I resolved to drink no more wine (in 1822), I had occasionally drank beer and cider. But now, on weighing anchor from Hampton Roads, I decided from henceforth to drink neither ale, porter, beer, nor cider, of any description. My prospect for making a profitable and successful voyage was now more flattering than my last; for I now owned a part of the *Empress* and her cargo, and had the confidence of my partners to sell and purchase cargoes as often as it would prove to our advantage, and use my judgment about going to what part of the world I pleased. But with all these many advantages to get rich, I felt sad and homesick. I had provided myself with a number of what I called interesting books, to read in my leisure hours. My wife thought there were more novels and romances than were necessary. In packing my trunk of books, she placed a pocket New Testament, unknown to me, on the top of them. On opening this trunk to find some books to interest me, I took up the New Testament, and found in the opening pages the following interesting piece of poetry, by Mrs. Hemans, placed there to arrest my attention :—

“Leaves have their time to fall,  
And flowers to wither at the north wind's breath,  
And stars to set—but all,  
Thou hast *all* seasons for thine own, O Death!

“Day is for mortal care,  
Eve, for glad meetings round the joyous hearth,  
Night, for the dreams of sleep, the voice of prayer,  
But all for thee, thou mightiest of the earth.

“Youth and the opening rose  
May look like things too glorious for decay,  
And smile at thee—but thou art not of those  
That wait the ripened bloom to seize their prey.

“We know when moons shall wane,  
When summer birds from far shall cross the sea,  
When autumn's hue shall tinge the golden grain,  
But who shall teach us when to look for thee?

“Is it when spring's first gale  
Comes forth to whisper where the violets lie?  
Is it when roses in our path grow pale?  
They have one season—*all* are ours to die!

“Thou art where billows foam;  
Thou art where music melts upon the air;  
Thou art around us in our peaceful home;  
And the world calls us forth—and thou art there.’

“These lines did arrest my attention. I read them again and again. My interest for

reading novels and romances ceased from that hour. Among the many books, I selected ‘*Doddridge's Rise and Progress of Religion in the Soul.*’ This and the Bible now interested me more than all other books.’”

The *Empress* arrived at Pernambuco, Brazil, October 30, where her commander was assailed by his associates, as he had been in other places, for refusing to drink wine at the dinner-table, which was very common in South America. Of this severe trial he writes :—

“A large company of us were dining with the American consul, Mr. Bennet. His lady, at the head of the table, filled her glass, and said, ‘Captain Bates, shall I have the pleasure of a glass of wine with you?’ I responded, and filled my glass with water. Mrs. B. declined, unless I would fill my glass with wine. She was aware, from our previous acquaintance, that I did not drink wine, but she felt disposed to induce me to disregard my former resolutions. As our waiting position attracted the attention of the company, one of them said, ‘Why, Mr. Bates, do you refuse to drink Mrs. Bennet's health in a glass of wine?’ I replied that I did not drink wine on any occasion, and begged Mrs. B. to accept my offer. She readily condescended, and drank my health in the glass of wine, and I hers in a glass of water.

“The topic of conversation now turned on wine-drinking, and my course in relation to it. Some concluded that a glass of wine would not injure any one. True, but the person who drank one glass would be likely to drink another, and another, until there was no hope of reform. Said one, ‘I wish I could do as Captain Bates does; I should be much better off.’ Another supposed that I was a reformed drunkard. Surely there was no harm in drinking moderately. I endeavored to convince them that the better way to do up the business was *not to use it at all*. On another occasion a captain said to me, ‘You are like old Mr. —, of Nantucket; he would n't drink sweetened water!’”

We pass over the Christian experience of Captain Bates, introducing those points only which seem closely connected with his advancement in moral reforms. It is sufficient here to state that in fulfillment of his firm resolutions on ship-board to erect the family



altar on his return home, and to become an active Christian, there appears in his autobiography the record of the several steps he took to that point, characterized by the firmness of the man, until he takes the baptismal vow. At this point he suggests the first temperance society organized in that community, of which he speaks thus:—

"The same day, while we were changing our clothes, I solicited Elder M., who baptized me, to assist me in raising a temperance society. As my mind was now free with respect to this last duty, I was forcibly impressed with the importance of uniting my energies with others, to check, if possible, the increasing ravages of intemperance. Since I had ceased to use intoxicating drinks, I was constrained to look upon it as one of the most important steps that I had ever taken. Hence, I ardently desired the same blessing for those around me. Elder M. was the first person whom I asked to aid me in this enterprise; failing with him, I moved out alone, and presented my paper for subscribers. Elder G., the Congregational minister, his two deacons, and a few of the principal men of the place, cheerfully and readily subscribed their names, twelve or thirteen in number, and forthwith a meeting was called, and the 'Fairhaven Temperance Society' was organized.

"The majority of our little number had been sea-captains, and had seen much of the debasing influence exerted by ardent spirits among its users, abroad and at home. They seemed the more ready, therefore, to give their names and influence to check this monster vice. Elder G. exclaimed, 'Why, Captain Bates, this is just what I have been wanting to see!' The meeting was organized by choosing Captain Stephen Merihew president, and Mr. Charles Drew secretary. Pending the discussion in adopting the constitution, it was voted that we pledge ourselves to abstain from the use of ardent spirits as a beverage. Having no precedent before us, it was voted that rum, gin, brandy, and whisky were ardent spirits. Wine, beer, and cider were so freely used as a beverage that the majority of our members were then unwilling to have them in the list. Some doubts arose with the minority whether we should be able to sustain the spirit of our constitution without abstaining from all in-

toxicating beverages. One of our members, who had always been noted for doing much for his visiting friends, said, 'Mr. President, what shall I do when my friends come to visit me from Boston?' 'Do as I do, Captain S.," said another; 'I have not offered my friends any liquor to drink in my house these ten years.' 'Oh, you are mistaken,' said the president, 'it is twenty!' This doubtless was said because the man had ceased to follow the fashion of treating his friends with liquor before others were ready to join with him.

"Inquiry was then made whether there were any temperance societies then known. A statement was made that certain individuals in Boston had recently agreed together that instead of purchasing their liquor in small quantities at the stores, they would get it by the keg, and drink it in their own houses. This association was called the 'Keg Society.' If any temperance societies had ever been organized previous to the one at Fairhaven, we were unacquainted with the fact. A short time after our organization, one of our number was reported to have violated his pledge. This he denied. 'But you were intoxicated,' said we. He declared that he had not drank anything but cider, and that was allowed. We were told that his wife said she would a great deal rather he would drink brandy, for when he got drunk on cider he was as ugly again. During the trial of this member, he continued to declare that he had not violated the letter of the constitution. But it was evident to the society that he had violated the intent and spirit of it, which he was unwilling to admit, nor would he even promise to reform. He was therefore expelled.

"The society here saw the necessity of amending the constitution by striking out the words, 'ardent spirits,' and inserting in their place, 'all intoxicating drinks,' or something else that would sustain and aid the cause. From this a reform was introduced, which finally resulted in the disuse of all intoxicating drinks, except for medicinal purposes. This reform gave us the name of 'Teetotalers.'

"Before this, our temperance society had become exceedingly popular. Our meeting-houses in their turn were crowded with all



classes to hear lectures on the subject; and converts, both male and female, by scores cheerfully pledged themselves to the temperance constitution. Many of the citizens of New Bedford who came to hear, also united with us. From thence a society was organized in their town and other ones also. Arrangements were soon made, and a Bristol County Temperance Society was organized, and the Massachusetts State Temperance Society soon followed. Temperance papers, tracts, and lecturers multiplied throughout the land, and opposition began to rage like the rolling sea, causing the tide of temperance to ebb awhile. Then came the 'Cold-Water Army,' of little children from four years and onward, commingling their simple little songs in praise of water—pure, cold water—no beverage like unmingled, cold water. Their simple, stirring appeals, especially when assembled in their society meetings, seemed to give a new impetus to the cause, and re-arouse their parents to the work of total abstinence from all intoxicating drinks. As I examined my papers the other day, I saw the book containing the names of nearly *three hundred children* who had belonged to our Cold-Water Army at Fairhaven."

Although we had been closely associated in labor with Elder Joseph Bates for more than a quarter of a century, we had not at any time been so fully impressed with his moral value as since closely reviewing his life in the preparation of these articles. The reader will find his experience touching the question of proper food in the March number.

J. W.

### Something Concerning Wine.

WE are happy to receive from Eld. J. N. Andrews, now of Bâle, Switzerland, the valuable testimony against the alleged beneficial effects of unrestricted wine-drinking in wine-producing countries which we give below. No doubt our readers will be pleased to see in the REFORMER frequent contributions from both Eld. Andrews and Dr. Ribton, who favors us with an article for the first time.

TO THE EDITOR OF THE HEALTH REFORMER:—I send you an article from an esteemed friend in Southern Italy, H. P. Ribton, M. D., concerning the manufacture of wine. I be-

lieve his statement to be strictly truthful, and it is certainly worthy the attention of your readers. In a former letter he speaks of "wine and tobacco" in Europe, as "the two archangels of Satan." Those who see how these two articles are used in the Old World will almost approve the expression. As to wine, every one uses it. Men, women, children, the old, the young, the rich and the poor, church members and those who make no profession, all with one consent drink wine. The exceptions are very few, and they are "men wondered at." You are told that in the wine districts of Europe, where wine is drunk by all, drunkenness is quite unknown. Alas for the falsehood! Read what Dr. Ribton, in the subjoined article, says of Christmas, and it will give a good idea of the sobriety which is promoted by the free use of wine. I have seen, in former years, tables showing the number of arrests for drunkenness in American cities as compared with those in the cities of the wine-growing districts of Europe. The number was proportionally much greater in America than in Europe, and it was argued from thence that the people of wine-drinking countries had less of drunkenness than have those where it is not produced, and where, also, abstinence is so strongly urged. But figures can be made to lie. I will state a fact that will show how it is done in this case. So far as my observation extends, men are not arrested for simple drunkenness. The police take no notice of drunken men unless they commit some act of violence. I have often seen men drunken, but have never seen the police interfere with them; whereas, in America, they would be at once taken into custody.

As to tobacco, it is an all-pervading curse. It is bad enough in America, but in Europe the evil hardly knows bounds. Whether you take the first, the second, or the third class cars, you must ride in a dense atmosphere of tobacco smoke. The only exception to this is that in some of the second-class cars there are compartments or divisions in which smoking is forbidden. But even here the smokers will invade you, and unless you make a great effort to prevent it, they will fill even this place also with the fumes of tobacco. And as to the waiting-rooms at the stations, there are none in which you are not obliged to sit down in the tobacco smoke. I have seen a well-dressed woman enter the cars smoking a cigarette. I do not know that there are any societies of total abstainers in this part of the world; and as to tobacco, its use is not even called an evil by those who esteem themselves good Christians. Nearly all the ministers, so far as I am informed, drink wine and smoke



tobacco. They are not ashamed to be seen smoking in the cars. I write these things with pain.

J. N. ANDREWS.

#### HOW WINE IS MADE.

I live in the midst of a grape country. Every summer the view all around presents a waving ocean of vines, trained between poplar trees in trellised bowers; and when the warm breath of autumn has ripened the glowing fruit, it is sweet to sit beneath their shade with the green and purple clusters pendent on all sides, within reach of the hand. Nature is beautiful everywhere with the wonderful works of God.

When the month of October comes, the grapes are gathered and thrown into large tubs. Great, clownish peasants, whose feet have never known shoes or stockings, jump into them and stamp upon the grapes, singing merrily all the time. Feet that are seldom or never washed, covered with cakes of clay and perspiration; feet that are every day in contact with mud, stable manure, and dunghills,—what a delightful liquid is thus expressed may well be imagined. The juice covers feet and ankles, and flows around their legs. The habits of these peasants are as unhygienic as their lives are impure; and their legs are in consequence often eaten with scrofulous ulcers, sometimes horrible to behold. When the juice has been thoroughly squeezed out by constant tramping, it is poured into other vessels to ferment. In this state it presents pretty nearly the appearance of street mud.

Now if such feet were washed in water, I will answer for it that no one would drink the water, even though, like the above mixture, it were kept for one or more years; but because they are washed in grape juice, the case is different; the alcoholic fermentation atones for all. When the juice has stood for a month or so, the grosser part of the filth goes to the bottom, the soluble part remains in solution, and a semi-turbid liquid, containing more or less alcohol, is drawn off, which is called wine. This new wine sells at four sous (four cents) the bottle, and is greedily drunk by the peasants. It is ready for use by Christmas, and is the source of the obscene songs, the stabbing, and the wife-beating, with which the nativity of our Saviour is celebrated. For the use of more aristocratic stomachs, it is kept for a long period, mixed with water of doubtful purity, cheap rum, sugar, and other mysterious ingredients only known to the practical wine-maker. In this form it sells at a high price, and lies at the bottom

of the gout, indigestion, and other chronic disorders which are the support of a host of physicians. Indeed, without the aid of it and its fellow luxury, tobacco, the doctors would have but little to do.

H. P. RIBTON, M. D.

#### Function of the Human Skin.

THE following article from the *Boston Journal of Chemistry* is a complete exposure of the falsity of the doctrine taught by some hydropathists that the skin is affected by hydropathic appliances just as any animal membrane would be, serving simply as a means for the conduction of the process of osmosis:—

“That the skin of our bodies is an important organ of excretion is familiar to the readers of the *Journal*, in which the hygienic relations of the fact have been more than once pointed out. Since a large part of the matter rejected by the body has its natural outlet through this channel, the necessity of a healthy and cleanly skin is obvious. But while there is no dispute with regard to the practical bearings of this excretory process, the physiology of it has never been thoroughly understood. It has long been a question whether it is a purely physical phenomenon, or whether it depends upon some organic action of the body. In the one case, the rate of evaporation through dead skin should be the same as through the living skin; in the other, we should expect it to be different. The subject has been recently investigated by German physicists, and the results, as reported in *Der Naturforscher*, are of sufficient interest to justify us in giving a brief abstract of them.

“Experiments were made upon dead skin by stretching it over a vessel of water, the loss of weight in a given time being carefully measured. Those upon parts of the living body were made in a ‘respiration chamber,’ the increase of moisture in the air being accurately determined.

“In the former class of experiments, evaporation was found to be much greater through the thick skin of the sole of the foot (which contains many perspiration glands) than through the much thinner skin of the abdomen. The amount of evaporation was not affected by changes in the pressure of the liquid under the skin, nor by the ventilation of the air; but it was materially influenced by the temperature and degree of moisture, the evaporation being greater in proportion as the air was hotter and drier.

“In the experiments on the living body, the right arm was placed within the chamber.



Here, too, the hotter and drier the air, the greater the evaporation; but the ventilation of the air, which had no influence in the case of the dead skin, proved to be here an important factor, the evaporation being notably greater as the ventilation was more perfect.

"Some interesting experiments as to the influence of clothing were also made. The arm was covered with two sleeves, a linen one next to the skin and a flannel one outside this. It was found that, other things being equal, evaporation from the body is promoted rather than hindered by clothing, though the difference is not very great. The action of external influences, however, is materially modified by clothing; the increase in yield of water through rise of temperature and through improved ventilation being considerably greater for the bare arm than for the covered one.

"A careful comparison of the results (of which we have given the merest outline) favors the conclusion that evaporation from the living body is not a purely physical process, but rather is an organic function of the living sweat glands, modified indeed by external causes, but to a greater degree conditioned by internal influences."

[From the foregoing it may readily be seen how absurd was the practice of early water-cure doctors in macerating their patients for hours daily for the purpose of dissolving out of them the elements of disease or noxious medicine supposed to be harbored in the system. Absurd usages of this kind, founded upon ignorance or a false theory, are not entirely confined to the practice of early hydropathic practitioners, for many modern ones labor under the same mistaken notion. Neither diseases nor medicines can be soaked out of the body. If they are removed, it must be by the vital activity of the eliminating organs.—Ed.]

### Health.

TAKE, for example, a young girl bred delicately in town, shut up in a nursery in her childhood—in a boarding-school through her youth—never accustomed either to air or exercise, two things that the law of God makes essential to health. She marries; her strength is inadequate to the demands upon it. Her beauty fades early. She languishes through the hard offices of giving birth to children, suckling, and watching over them, and dies early; and her acquaintances lamentingly ex-

claim, "What a strange providence, that a mother should be taken in the midst of life from her children!" Was it Providence? No! Providence had assigned her three-score years and ten—a term long enough to rear her children and to see her children's children; but she did not obey the laws on which life depends, and of course she lost it.

A father, too, is cut off in the midst of his days. He is a useful and distinguished citizen, and eminent in his profession. A general buzz rises on every side of, "What a striking providence!" This man has been in the habit of studying half the night, of passing his days in his office and in the courts, of eating luxurious dinners and drinking various wines. He has every day violated the laws on which health depends. Did Providence cut him off? The evil rarely ends here. The diseases of the father are often transmitted, and a feeble mother rarely leaves behind her vigorous children.

It has been customary in some cities for young ladies to walk in thin shoes and delicate stockings in mid-winter. A healthy, blooming young girl, thus dressed, in violation of Heaven's laws, pays the penalty; a checked circulation, cold, fever, and death. "What a sad providence!" exclaim her friends. Was it Providence, or her own folly? A beautiful young bride goes, night after night, to parties made in honor of her marriage. She has a slightly sore throat, perhaps, and the weather is inclement; but she must wear her neck and arms bare; for who ever saw a bride in a close evening dress? She is seized with inflammation of the lungs, and dies before her bridal days are over. "What a providence!" exclaims the world, "cut off in the midst of happiness and hope!" Alas! did she not cut the thread of life herself? A girl in the country, exposed to our changeful climate, gets a new bonnet, instead of getting a flannel garment. A rheumatism is the consequence. Should the girl sit down tranquilly with the idea that Providence had sent the rheumatism upon her, or should she charge it on her vanity, and avoid the folly in future?

Look, my own friends, at the mass of diseases that are incurred by intemperance in eating or drinking, or in study, or in business; by neglect of exercise, cleanliness, pure air; by indiscreet dressing, tight lacing, etc.; and all is quietly imputed to Providence! Is there not impiety as well as ignorance in this? Were the physical laws strictly observed from generation to generation, there would be an end to the frightful diseases that cut short life, and of the long maladies that make life a torment or a trial.—*Sel.*



### Wearing Glasses.

MANY charming faces are completely bereft of the expression they would have had, unmolested by the silly desire of otherwise sensible ladies, for wearing glasses. An unaccountable disposition to have it supposed that they have defective vision, is another strange phase in the vagaries of fashion. To be near-sighted is a coveted grace.

In some departments of elevated society, nothing is more common than to see young ladies harnessed in spectacles, or peering through an eyeglass at their familiar acquaintances on the sidewalk, as though it were extremely difficult to see them at all.

None but fops or idle pretenders of both sexes, who ape the artificial manners of some polar star in fashionable circles, think of making themselves ridiculous in that particular way. It is conclusive evidence of their vanity and mental weakness. An eyeglass dangling from a splendid chain is a coveted ornament for a drawing-room. To be squinting through it at wall-pictures, or closely examining an object that a blind man might almost see, by those who have no imperfection of vision, is a common folly.

Everything, near or distant, must be scrutinized through an eyeglass. Not because they cannot see, but simply because it is extremely genteel to be purblind.

To gaze with profound attention through an eyeglass at a horse passing the window, with an avowed inability to determine what creature it may be by the unassisted eye, is an immense recommendation, indicative of polished manners. If a lady is ingenious in striking attitudes at the same moment, she may consider herself a queen of fashion.

No vulgarity is rated lower in the tablet of exquisite refinement, than having good sound eyes. Examining those to whom one has an introduction, with an eyeglass, as an entomologist would scrutinize a bug under a microscope, passes for extreme refinement.

Young misses, fresh from a boarding-school, are in ecstasies when they first have possession of an eyeglass set in a chased gold rim. They then cannot see those they do not wish to recognize—which is a decided step in their education.

On the whole, it is deplorable that civilization delights in blindness. Possibly a sentiment prevails that one can see enough with half an eye. But this, absurd as it is, is associated with another equally ridiculous habit, that has even got possession also of men of the no-brain order. To lisp divinely, and be in poor health, is the climax of perfection in the constitution of a modern lady of unexcep-

tionable social position. It gives a finishing perfection to a belle of the period.

These are follies that amuse people of sense for a while; but it is, nevertheless, lamentable that folly should have such prominent ascendancy where genuine good-breeding and worth of character are at a discount.

Those who cannot afford to be blind voluntarily, like those who articulate their words distinctly, have no influence where near-sightedness and lipping are the criteria of social excellence.

Near-sightedness is most appreciated in circles distinguished for opulence. In the country, remote from the baneful influences and innovations of fashionable folly, the ladies have eyes keen enough to discriminate between affectation and malformations.

A real necessity for glasses appertains to advanced age, but rarely as necessary as those who have them to sell would have the world believe.

There is another unrebuked exhibition of vanity or self-esteem—it is difficult to determine which—viz., having portraits and photographs saddled with lunettes at the expense of a silly, unmeaning expression. Artists dread them, knowing by experience the impossibility of giving any character to the picture of a face marred by bows and glasses.

Portraits of men and women with strongly molded features, full, animated eyes, in harmony with their other physiognomical attributes, are deprived of an essential part of their force of expression when painted in spectacles.

It is quite surprising with what tenacity some young, newly-fledged clergymen cling to glasses, whose eyes never had a defect in them, on the presumption, it is theoretically presumed, that an audience associates with such toggerly, profound scholarship, and deep theological explorations in the dust of ages.

No orator who moves the multitude by the power of his eloquence, wears glasses. To touch the heart with fitting words, to arouse the deepest feelings of sympathy, or excite ferocious indignation by a recital of real or imaginary wrongs, the full, unshackled face of the speaker must be seen. Sentences that roll along the aisles like avalanches from the lofty summits of mighty mountains, would lose their effect if enunciated in the dark.

An orator must not only be seen as well as heard, to accomplish the highest results of his burning language, but his face, and particularly his eyes, must not have their electrical energy intercepted by non-conducting glasses.—*The Ways of Women.*

TRUTH is the best buckler.



# LITERARY MISCELLANY?

Devoted to Natural History, Mental and Moral Culture, Social Science,  
and other Interesting Topics.

## THE NOBLE NATURE.

BY BEN JONSON.

It is not growing like a tree  
In bulk, doth make man better be;  
Or standing long an oak three hundred year,  
To fall a log at last, dry, bald, and sere;  
A lily of a day  
Is fairer far in May,  
Although it fall and die that night;  
It was the plant and flower of Light.  
In small proportions we just beauty see;  
And in short measures life may perfect be.

## The Follies of Fashionable Dress.

BY MRS. E. G. WHITE.

INDIFFERENCE and ignorance in regard to the laws which govern our being are sins so common that we have learned to look upon them with undue tolerance. But when we reflect that we are under obligation to God to care for the soul's habitation, that in order to properly fulfill the duties he has assigned us we should preserve ourselves in the best possible condition of health, then we begin to realize that attention to our physical health is a sacred duty which we owe to our Creator. If we pursue a course that weakens our strength, either physically or mentally, we cannot render perfect service to God; we fall short of the duties required of us by him, and thus rob him of his due.

The violation of nature's laws results in disease; and the greater share of the ills of life might be avoided by conforming the habits to those divinely appointed rules. Women especially are the victims of various maladies which might be lessened, if not entirely prevented, by right habits of life. Half their sufferings may be attributed to their manner of dress, and the insane desire to conform to the fashions of the world, introduced as a system of speculation and profit, or for other and baser reasons. Every Christian woman should dress neatly, simply, and healthfully, whether the world approve or disapprove. This cannot be done in adopting the present style of dress. The full back skirts are burdensome, create undue heat in that portion of the body which they cover, and, together with the ridiculous fashion of pinning or tying back the outer drapery, impede the movements of the limbs, make it an

impossibility to walk easily or naturally, or to engage with any degree of comfort in any active exercise or useful labor.

The beauty of simplicity is lost and the graceful fall of the drapery broken up by manifold puffs, ruffles, plaits, and sashes.

Time and money are thus expended, not to add to the convenience and healthfulness of the dress, but to render it ungraceful, untidy, cumbersome, and injurious; and all this is for the express purpose of conforming to a senseless fashion. The useless trimming and arranging of these dresses take a vast amount of time. This may not seem of so much consequence to the wealthier class, who hire all their sewing done, but to those of limited means it is a serious consideration. Yet, nevertheless, most of them endeavor as far as possible to meet the demands of fashion, and impose upon themselves a rigorous task in forming with their own hands the useless trimming and appendages thought necessary to complete a "stylish" costume. The purse is pinched, things needed for the comfort of the home are dispensed with, time which should be given to the family is wasted, poverty creeps in with extravagance and neglect; and wretchedness follows this blind, unreasoning effort to keep pace with the fashionable world. Happiness, health, and often life itself, are sacrificed on the altar of fashion.

Even those who profess to be reformers in the matter of dress have imbibed narrow views of the subject and fail to consider it in the broadest and fullest sense. Many conceive of dress reform as consisting alone in a shortening of the dress to escape the floor by several inches, and, having effected this, they flatter themselves that they have done all that is necessary. Although the shortening of the skirts is well enough so far as it goes, yet their dress may still be unhealthful in many respects. The lungs may be compressed by tight-fitting bands, waists, or corsets, which hinder the free flow of blood through the system. It is essential to health that the chest should have room to fully expand, so that the lungs may be enabled to take full inspirations of air. Many who have died of consumption might have lived their allotted term of life had they dressed in accordance with the laws of their being. The strength of the system is, in a great degree, dependent upon the



amount of pure fresh air breathed. If the lungs are restricted, the quantity of oxygen received into them is also limited, the blood becomes vitiated, and disease follows. Confinement in-doors and consequent deprivation of the invigorating sunlight and the exhilaration of exercise in the pure open air, complete the ruin begun by wrong habits of dress; feebleness and premature death are the result.

The dangers resulting from a compression of the waist are not realized by the majority of women, though many able pens have treated upon the subject. Many claim that tight lacing is now nearly or quite abandoned, and such may think these remarks are uncalled-for; but it is true to-day that the corsets and dresses of most women are worn too tight for the proper action of the vital organs. The lungs, heart, and liver are burdened in their work. Every article of clothing upon the person should be worn so loose that, in raising the arms, the clothing will be correspondingly lifted by the action.

This brings us to another error in the dress of women at the present day: The under-clothing is usually sustained by the hips alone. This heavy weight, pressing upon the bowels, drags them downward, and causes weakness of the stomach and a sense of lassitude which leads the sufferer to incline forward; this tends to farther cramp the lungs and prevent their proper action. The blood becomes impure, the pores of the skin fail in their office, sallowness and disease set in, beauty and health are gone. Ladies may resort to cosmetics to restore the tint of the complexion, but they cannot thus bring back the glow of healthful feelings to the heart. That which darkens and dinges the skin also clouds the spirits and destroys the cheerfulness and peace of the mind. Every woman who values health should avoid hanging any weight upon the hips. The shoulders should be made to sustain the weight of every article of clothing worn upon the person. This will relieve the bowels from undue pressure, and prevent that weakness of the stomach and bowels which is prevailing to an alarming extent.

Every wrong habit which injures the health of the body, reacts in effect upon the mind. Many care-worn, nervous, anxious women are so because they cheat themselves of the pure air that makes pure blood, and the freedom of motion which sends that blood coursing through the veins and gives life, health, and energy. Women, of all persons, need strength of mind and body to grapple with the ills and anxieties of life; but most of them are so weak and nerveless that they are conquered and crushed by them instead.

Thousands of women are to-day suffering from a painful relaxation of the system for want of vigorous physical exercise. They are rusting out their lives in inaction. Their present style of dress proves a hindrance to the free use of their limbs, and they gradually, almost unconsciously, give up healthful exercise, and surrender to a life of inactivity. Many of the women of the present time are only able to arrange their dresses, put them on and carry them about with their burden of over-skirts, puffing, plaiting, ruffling, trimming, bows, and buttons. After the dressing, ornamenting, and frizzling are accomplished, they feel wholly unable to go out in the open air and engage in exercise that would expand their lungs and give elasticity to their limbs; besides, such exercise would be likely to spoil their fine dresses. Therefore they indulge in sedentary habits at the expense of health, happiness, and even life. They are abject slaves to the tyrant, fashion. They deform the human form divine by the many inventions decreed by this monster.

Jesus requires of none of his followers the sort of slavery that fashion demands. He would free them from this self-imposed thralldom. He pities them as he sees them sacrificing health and the best interests of life upon this unholy altar. He invites them: "Come unto me, all ye that labor and are heavy-laden, and I will give you rest." He presents his yoke in contrast with the galling one they have placed upon their own necks, and says, "Take my yoke upon you, and learn of me; for I am meek and lowly in heart, and ye shall find rest unto your souls. For my yoke is easy, and my burden is light." Here is the secret of content and peace and happiness: obedience of the laws of nature and of God. The true Christian, possessing the meekness and lowliness of Christ, is content with plain, convenient, healthful garments, and seeks to live a life of usefulness and conform his habits to the example of Jesus. Such a one will find the truest happiness, the reward of well-doing. Such a one will be lifted above the slavery of an artificial life into the freedom and grace of Christ-like simplicity.

But what account can those who follow the fashions and follies of the present day render to God for the use they have made of the time and abilities given them for wise improvement? Their minds, instead of being developed and strengthened by proper cultivation, have been dwarfed and crippled by being devoted almost entirely to the arrangement of the dress in accordance with the demands of fashion. This is the crying evil of our sex, and lies at the bottom of many of the



failures and miseries of life. Many women who profess to be followers of Jesus Christ are servants to the fashions of the world, and delight to adopt new inventions in styles, constantly appearing out in new costumes and new deformities of dress.

It would be well if a pledge of temperance in dress could be presented for our women to sign and to observe. The intoxicating influence of extravagance and display in dress has so degrading an effect upon the minds of many women that such a measure would seem justifiable and reasonable. Thousands are unfitted for the every-day duties of domestic life because of this mania for dress. Their children, who are a precious trust to them from God, are neglected, and grow up without proper care and attention, obtaining too often an education in vice. Prayer in the closet is abandoned, the Word of God is left unread, and there is no time nor aptitude for religious meditation. Said Christ, "Whosoever will come after me, let him deny himself, and take up his cross, and follow me." Those who are attracted to Christ and who live for the future immortal life, will not be slaves of fashion.

### Visit to Middle Park.

BY MARY L. CLOUGH.

ONE of the distinctive features of Colorado is her system of upland parks. There are four large alluvial tracts that together constitute what is commonly understood as "The Parks of Colorado." They are the North, Middle, South, and San Luis Parks. They vary in size from twenty by fifty to one hundred by two hundred miles. North Park extends to the northern limit of the State and within about forty miles of the Union Pacific Railroad. Its elevation is too great for an exuberant vegetation; but game is plenty, and the streams are full of trout.

Middle Park is below, separated from the North by a range of mountains. It is just west of what is known as the "Snowy Range," the rocky wall that divides the continent, from the eternal snows of which start the rivers of the Atlantic and Pacific, which, ever rushing away from each other, bury themselves in the blue oceans three thousand miles apart. Three lofty peaks are stationed near this Park—on the north-east, Long's Peak, towering 14,050 feet above sea-level; at the south-east, Gray's Peak, 14,251 feet; and at the south-west, Lincoln's Peak, 14,100 feet. Like watchful sentinels these lofty mountains frown down upon the rolling plains and smiling valleys of the sheltered Park.

The South Park communicates with North

Park. Pike's Peak and Lincoln's Peak are situated, respectively, at the north and south, while the Snowy Range is left on the west. The waters of this Park flow into the Arkansas and South Platte rivers. The scenery is diversified, and the soil rich. Here Nature has been prodigal of her wealth in form and color; everywhere the eye is delighted with the smoothness of the hills and valleys, and the brilliance of flowers and foliage. There are many cultivated ranches along the streams and at one point quite extensive salt-works.

San Luis Park is in Southern Colorado and New Mexico. It is the largest of the four, and is probably best adapted to agricultural purposes. Until within a few years, it was little visited, having been the haunt of hostile Indians. Middle Park is a popular summer resort for those who have the spirit of adventure and strength necessary to accomplish the journey. Many invalids go there for the benefit derived from the medicinal properties said to be contained in the water of the hot mineral springs on Grand River. Tourists, in "doing" Colorado, find it an incumbent duty to visit Middle Park. During the past year a wagon-road has been constructed over the range and into the Park, making the achievement not so nearly impossible as formerly. For this enterprise, Colorado is indebted to J. Q. Rollins, an energetic Coloradoan, whose little mining-town of Rollinsville lies on the road, nestled almost at the foot of the Range in a green, grassy meadow on the banks of the South Boulder Creek, the water of which, tumbling down from the rugged mountains, turns the wheels of his machinery and sets his stamp mills going.

Toward the last of August we started for a trip into Middle Park. Our party numbered seven, three of whom were tourists from Massachusetts, the rest, with the exception of myself, Coloradoans. There were then several passes by which to reach the Park, all precipitous and rough, giving but an uncertain foothold for a single animal at a time, with the exception of one, the Boulder Pass,—since been converted into the Rollin's Road,—and over this pass the experiment had been made during the summer of taking horses and wagons. It was considered barely practicable. Our guide advised us to ride ponies and pack an extra number with our provisions and other necessities; but our Massachusetts friends were novices in the art of equestrianism, the ladies were delicate, and we all thought that what had been once done could be done again. We also thought that a wagon would be convenient for our



baggage and would afford a comfortable change for ourselves when tired of riding horseback. So, well-mounted and equipped, our wagon furnished with necessary provisions, clothing, and camping paraphernalia, all amounting to only a few hundred pounds, we started on a pleasant day from Central City, the chief fitting-out point for these mountain adventures.

The ladies, four in number, were dressed in stout, serviceable suits, water-proof cloaks, broad-brimmed hats, thick gloves and boots. The gentlemen were appropriately clad, as they always are, and the whole party were in excellent spirits. The first ten or fifteen miles the road was tolerably good, then it abruptly ascended over rough crags and huge boulders. One of the gentlemen was obliged to walk by the side of the wagon and hold first upon one side, then upon the other, to prevent its overturning, as the wheels separately mounted on immense rocks, and the horses scrambled painfully over. At intervals, the way became so impassable as to render it necessary to transfer the baggage to the backs of the horses and "pack" over the bad places. Before the first day was passed, we all heartily wished the wagon had been left at home and all the baggage but a few blankets and the indispensable frying pan.

But our guide and driver was acquainted with the road, and no matter how impassable it seemed, a gulch under one wheel and a precipice under the other, he drove triumphantly over with his foot on the brake and his watchful eye everywhere, while the horses seemed to partake of his determination and courage, straining every nerve and muscle, till the veins swelled and knotted beneath their glossy hides. They clambered on over rocky steeps and chasms, the wagon jolting and bouncing after; but none of the tourists felt any disposition to take a seat in it for the purpose of rest and change. The change they preferred was that of dismounting and picking their way on foot over the rocks, bridle in hand, and their horses scrambling after them.

The second night found us bivouacked at the foot of the Snowy Range. Our camp was among the pines on the border of a little green plateau where our horses found delicious pasturage. We had not brought a tent, for one capable of accommodating our company would have been considerably heavy, and we had avoided carrying any great weight. So a slanting shed was quickly constructed, two tall trees serving as front corner-posts. This shed was covered with a piece of heavy canvas, and over that, branches of hemlock and pine were laid, making all secure. Couches

were made of elastic pine boughs with blankets spread over them, and by that time night had closed upon us, fifty miles from any human habitation, almost on the border of the timber-line, in the regions of untimely snow and sudden tornadoes. The front of our camp was open, and right before it crackled a magnificent fire, the high, ruddy flame of which lit up the evergreen lodge, the bright faces and negligent reclining figures of the group gathered before it, the grazing horses, the heaps of saddles and accouterments, while the heavy back-ground of somber pine forest was cast in deep shadow. It threatened a storm before morning, and although the moon shone bright upon us, we could see the clouds circling about the summits of the Range. Right before us, above the timber-line, swept up the barren slope of upper mountain, gray with rock or white with snow; and as we looked, over its crest a storm of sleet and snow circled and eddied, white and silvery in the shivering moonlight. Now and then dark clouds would gather and hide the mountains, then disperse, leaving their bald brows standing out bleak and cold in the moonlight; but again the white storm would whirl over the summit in waving lines, sweeping and circling down the sides almost to the place where lay our little camp, a speck of brightness in the weird, eerie scene. Long we sat by the camp-fire, telling stories and singing songs that reverberated through the forests and waked the sleeping echoes of ages. But finally, neither the novel fascination of the situation nor the charm of the roaring fire could cheat nature of her dues, and all the camp was wrapped in sleep, save one solitary sentinel who kept watch by the fire.

Sunshine came with the morning, although we could still occasionally see storms careering over the heights. The temperature was cold, and the atmosphere thin, at the altitude to which we had arrived, and the merry jokes of the previous evening were forgotten as we shiveringly prepared for the real trial of the expedition—crossing the summit of the Snowy Range. A heavy pack was placed behind the saddle of every horse in order to lighten the wagon, and, wrapped in cloaks, shawls, and overcoats, we mounted and commenced the toilsome ascent. Slowly and laboriously we climbed the precipitous mountain-side, frequently delayed at some particularly ugly place to pack over the little baggage remaining in the wagon. The wind blew crisp and frosty from over the summit, and chilled the blood in our veins. The day before, we had basked in the summer sunshine; now we were muffled to the eyes, and facing a January



north-wester. Finally the storm which had been threatening us all the morning descended with sleet, snow, and tornado. The wind bore down in our faces sharp as a knife. The horses winced and shivered. We drew our heavy garments about us, but the gale snatched them away like rags. The change in the atmosphere was also painfully perceptible to all, especially to those unfortunate enough to possess weak lungs. Some of us, not being able to get breath enough to walk, resigned ourselves to bouncing in the wagon, where it was practicable, while the rest trudged on foot, it being almost impossible to sit on the horses in that tempestuous wind and piercing cold.

Suddenly the storm abated, the sun shone out, and we stopped to rest in a little grove, the extreme out-post of the timber-line. Right before us was a nearly perpendicular pitch of considerable length, the last sharp step before we struck the rolling swell of the summit. At the right, down an abrupt declivity of perhaps one hundred rods, lay a little valley with two tiny lakes, green as emerald, nestling in its breast. Toward the north, on the upheaving slope was an immense snow-field, stained by weather and furrowed by streams flowing from and over it into a deep ravine below. Above and around, peak on peak towered frowningly to the sky, with ever and anon an angry storm circling round their brows. Every crag and spur of the ragged mountains stood out sharply in the rare pure atmosphere.

Again we resumed the march. We had achieved the ascent of that last steep, and had before us the crossing of the broad, bleak summit, when the tempest again burst upon us. Four of our number, two of whom were ladies, were walking some distance in the rear, and before they had overtaken the wagon in which the rest of us were seated, they were completely chilled and wet with the cold rain accompanying the sleet and snow. Fearing that it would be dangerous to discontinue their exercise in such a situation, and at such a time, they decided to walk, keeping the wagon well in sight, until the storm should slacken, as riding horseback was entirely out of the question. But the storm did not slacken; the wind increased to a hurricane; the cutting sleet drove directly in our faces, and it was impossible to keep our eyes open or distinguish objects a yard from us. At length, the horses were blinded and refused to go, irrespective of coaxing, threats, or whip. Stranded on the top of the pass, 12,000 feet above the level of the sea, with all the angry demons of storm battling and shrieking around us, unable to discern direc-

tion or surroundings—we were in an unenviable predicament. Perhaps twenty minutes were passed in ominous, inactive silence; then a slight veering of the wind enabled the horses to open their eyes and go on. Hope revived, and we took a new lease of life.

Clear across the broad summit of that terrible Range we traveled that fearful day. Sometimes we felt that we were about to freeze, and experienced that dull lethargy which succeeds the stinging pain of cold. We seemed to have been hours in this condition, although we took no note of time, when we began to descend the western slope, the temperature became more tolerable, the storm slackened, and a short distance ahead we perceived the glimmer of a fire and saw human figures about it. We hurried on and soon reached a camp where we were heartily welcomed by a party just returning from the Park. They were kind as strangers always are in the West, and did all they could for our comfort. We basked before the fire with aching limbs but thankful hearts. The sun shone forth in the frigid weather. We had left the storm behind us.

But where were our friends? We felt much anxiety lest our track had been covered with snow so quickly as to disable them from following us, or that cold and fatigue had overcome them. A party was preparing to go in search of them when the four forlorn pedestrians appeared in sight. A loud and joyful hurrah greeted them, which was faintly returned, and directly they staggered into our midst with white pinched faces and frozen, bedraggled garments. The ladies especially had suffered much in that five-mile tramp through a mountain snow-storm; and one of them fainted from chill and exhaustion immediately upon reaching camp. Upon application of the usual restoratives she soon revived, and after putting on dry clothing and partaking of food, all the unlucky adventurers were ready to pursue the line of march again. It is astonishing how much exposure and fatigue one can endure without serious results in that bracing, healthful climate. We had rushed from the lap of summer into the very jaws of winter, yet even the ladies, delicately reared and unused to much active exercise, experienced no serious consequences from their long and perilous exposure. Night found us snugly encamped on the other side of the Range, having made an additional journey of five miles over a frightful road to the warm timber of the farther slope.

The next day was fair and smiling. While winding along a narrow ridge, a sudden turn brought before us the magnificent panorama of Middle Park—a vast garden consisting of



grassy plateaus, gentle hills, winding, wooded streams, and lovely groves, the whole encircled by gigantic mountains all frosted and silvered by the storm of yesterday. At a merry pace we descended into the valley. We made a noon halt on the border of a wood, gave our horses their dinner, and after lunch, part of our number went fishing in a sparkling trout-stream near by, while the rest stretched themselves idly upon luxuriant piles of blankets, reading or sleeping, while above their heads the tall pines soughed and sung in the upper breezes. One of our ladies had the triumph of capturing the first trout, a shining, speckled fellow weighing two pounds. That night, by a roaring fire, dinner was served up dainty and delicious enough for a king. What appetites we had! and how the richly browned trout disappeared as if by magic! Then we had fresh strawberries for dessert, picked during the afternoon. We felt that we were especially favored; for snow-storms and ripe strawberries are not met every day in August.

*(To be concluded next month.)*

### The Megatherium.

IN the interesting collection of specimens contributed by Prof. Ward from his museum—which was displayed in the Agricultural Department of the Centennial Exhibition at Philadelphia—there was a plaster model of a skeleton which attracted a marked degree of attention. The original is preserved in an English museum, and is the fossil remains of a huge beast which once roamed the wild pampas of South America. Thousands gazed in mute astonishment at the massive framework of this relic of a by-gone age. Its proportions were immense. The pelvis measured nearly five feet from hip to hip, being much larger than that of the elephant. The thigh bone was three times as thick as that of the largest elephant. The hind foot was a full yard long, the heel bone constituting nearly one-half the entire length. The forefeet had four digits, each armed with an immense nail well formed for cutting and digging. The hind foot had but three toes.

The tail of this enormous beast was formed upon the same massive plan as the rest of his body. Some of the segments nearest the body measured nearly a foot and a half in transverse diameter. Its great strength enabled it to serve as a means of support, and perhaps also of defense.

The total length of the beast from the end of its nose to the extremity of its tail was about eighteen feet. It was much larger than

the rhinoceros, and scarcely inferior to the elephant in size. Its general form places it in the same class of animals with the sloth, which is still a native of South America.

The disciple of evolution could scarce restrain the impulse to do homage to this ponderous form, recognizing in it the hypothetical progenitor of the human species. Though not indorsing this unestablished theory, one is struck with the many points of similarity to the human skeleton. Like man, it had a collar bone—unlike nearly all quadrupeds—and the corresponding bones of the anterior and posterior extremities, or arms and legs, of man. Like man, also, it walked upon its palms, instead of upon the ends of its fingers and toes, as do the horse, cow, and numerous other quadrupeds. Its massive tail might be considered as a full development of the rudimentary caudal appendage represented in man by the coccyx. Like man, also, its natural food was furnished exclusively by the vegetable kingdom.

Notwithstanding all these points of similarity, dissimilar characters were quite as numerous; and a still closer analogy might be readily established between man and other members of the brute creation.

Where did the megatherium live? is one of the many interesting questions which scientists propound respecting this animal. History is silent on the subject. No ancient naturalist ever described its structure or its habits. Geologists are fond of assigning to the megatherium an antiquity too remotely anterior to the advent of man upon this terrestrial globe for calculation. Whether the facts which have been clearly established are sufficient to warrant this conclusion, it must be left to every investigator to decide for himself. It would certainly have been a grand sight to have seen one of these prodigious creatures at work in its native forests, cutting and tearing the roots of mammoth trees to loosen their foundations, and then bearing them to the earth with the weight of its massive body to secure the succulent fruits which constituted its favorite food.—  
ED.

### The Social Quicksand.

VICTOR HUGO gives the following graphic description of "earth drowning," which is a most forcible illustration of the way in which thousands of young men are swallowed up by that deadly social "quicksand," intemperance:—

"It sometimes happens, on certain coasts of Brittany or Scotland, that a man, traveler



or fisherman, walking on the beach at low tide, far from the bank, suddenly notices that for several minutes he has been walking with some difficulty. The strand beneath his feet is like pitch; his soles stick to it; it is sand no longer—it is glue.

"The beach is perfectly dry, but at every step he takes, as soon as he lifts his foot, the print which it leaves fills with water. The eye, however, has noticed no change; the immense strand is smooth and tranquil; all the sand has the same appearance; nothing distinguishes the surface which is solid from that which is no longer so; the joyous little cloud of sand-fleas continue to leap tumultuously over the wayfarer's feet. The man pursues his way, goes forward, inclines to the land, endeavors to get nearer the upland. He is not anxious. Anxious about what? Only he feels somehow as if the weight of his feet increases with every step he takes. Suddenly he sinks in.

"He sinks in two or three inches. Decidedly he is not on the right road; he stops to take his bearings. All at once he looks at his feet. His feet have disappeared. The sand covers them. He draws his feet out of the sand; he will retrace his steps; he turns back; he sinks in deeper. The sand comes up to his ankles; he pulls himself out and throws himself to the left; the sand is half-leg deep. He throws himself to the right; the sand comes up to his shins. Then he recognizes with unspeakable terror that he is caught in the quicksand, and that he has beneath him the fearful medium in which man can no more walk than the fish can swim. He throws off his load, if he has one, lightens himself like a ship in distress; it is already too late; the sand is above his knees. He calls, he waves his hat or his handkerchief; the sand gains on him more and more. If the beach is deserted, if the land is too far off, if there is no help in sight, it is all over.

"He is condemned to that appalling burial, long, infallible, implacable, impossible to slacken or to hasten, which endures for hours, which seizes you erect, free, and in full health, which draws you by the feet, which at every effort that you attempt, at every shout you utter, drags you a little deeper, sinking you slowly into the earth while you look upon the horizon, the sails of the ships upon the sea, the birds flying and singing, the sunshine and the sky. The victim attempts to sit down, to lie down, to creep; every movement he makes inters him; he straightens up, he sinks in; he feels that he is being swallowed. He howls, implores, cries to the clouds, despairs.

"Behold him waist-deep in the sand. The

sand reaches his breast; he is now only a bust. He raises his arm, utters furious groans, clutches the beach with his nails, would hold by that straw, leans upon his elbows to pull himself out of this soft sheath, sobs frenziedly; the sand rises. The sand reaches his shoulders; the sand reaches his neck; the face alone is visible now. The mouth cries, the sand fills it; silence. The eyes still gaze, the sand shuts them; night. Now the forehead decreases, a little hair flutters above the sand; a hand comes to the surface of the beach, moves and shakes, and disappears. It is the earth drowning man. The earth filled with the ocean becomes a trap. It presents itself like a plain and opens like a wave."

### A Skeptic's Advice.

BENJAMIN FRANKLIN was a deist, but had sense enough to see the banefulness of infidelity. When Thomas Paine sent him a portion of his "Age of Reason" for examination, he wrote, "I have read your manuscript. You strike at the foundations of all religion. You will not succeed, so as to change the general sentiment of mankind on that subject. The consequence of printing this piece will be mischief to you and no benefit to others. He that spits against the wind spits in his own face. You may find it easy to live a virtuous life. You have a clear perception of the advantages of virtue. But think how great a portion of mankind consists of weak and ignorant men and women and of inconsiderate youth of both sexes, who need the motives of religion to restrain them from vice. Perhaps you are indebted to your religious education for the habits of virtue upon which you now justly value yourself. I would advise you, therefore, not to attempt unchaining the tiger, but to burn this piece before it is seen by any other person. If men are so wicked *with religion*, what would they be *without it*?"—*Sel.*

**The Best Sauces.**—A prince was overtaken in his walk by a shower, and sought shelter in the nearest cottage, where he was kindly received.

The children happened to be sitting at table, with a dish full of oatmeal porridge before them. They were all eating it with a right good appetite, and looked, moreover, as fresh and ruddy as roses.

"How is it possible," said the prince to the mother, "that they can eat such coarse food with such evident relish, and look so healthy and blooming withal?"

The mother answered, "It is on account



of three kinds of sauces which I put on the food. First, I let the children earn their dinner by work."

"And what then?" asked the prince.

"Secondly," said the mother, "I give them nothing to eat except at meal-time, that they may bring an appetite with them to table. Thirdly, I bring them up in the habit of contentment, as I keep them altogether ignorant of dainties and sweetmeats."

"Seek far and wide, no better sauce you'll find,  
Than hunger, work, and a contented mind."

—*Sel.*

**Honorable Employment.**—There is nothing derogatory in any employment which ministers to the well-being of the race. The plowman that turns the clod may be a Cincinnatus or a Washington, or he may be a brother to the clod he turns. It is in every way creditable to handle the yard, and to measure tape; the only discredit consists in having a soul whose range of thought is as short as the stick and as narrow as the tape. There is no glory in the act of affixing a signature by which treasures of commerce are transferred, or treaties between nations are ratified; the glory consists in the rectitude of the purpose that approves the one and the grandeur of the philanthropy that sanctifies the other. The time is soon coming, the *Chicago Journal of Commerce* thinks, when by the common consent of mankind, it will be esteemed more honorable to have been John Pounds, putting new and beautiful souls into the ragged children of the neighborhood, while he mended their fathers' shoes, than to have been set on a throne.—*Sc. Am.*

**Combustible Earth.**—While recently engaged in botanical exploration on the higher parts of the island of Réunion, M. de l'Isle heard of some caverns, the soil of which was combustible. He visited one of them and found it a grotto about ten meters in depth and six meters broad. Entering by a small aperture, you descend to the bottom by a rapid slope. The bottom is formed, more than an inch thick, of a substance of ocher-yellow color, soft to the touch, insipid, inodorous, dividing readily into very light fragments which leave yellow powder on the fingers; these are easily reduced to powder by pressure or friction. When a light match is applied to one of the fragments, the latter burns, if dry, with a very short yellow flame, almost without smoke or smell. If a little moist, it is consumed without flame, with abundant smoke, and a smell of burnt herbs.

MM. Bureau and Poisson have studied this interesting substance with the microscope, and found it entirely composed of small bodies which must be spores or grains of pollen. After various comparisons they were struck with their resemblance to spores of Polypodeæ in form and reticulation and color; and they found among the Polypodeæ of Réunion, sent home by M. de l'Isle, one whose spores are almost identical with the small bodies in question. From the cohesion of the spores, and the slit found in most of them, by which the contents have escaped, it is inferred that this accumulation has been caused by water and not by wind. It is probably the first time that a rock has been found of such composition.—*Am. Jour. of Microscopy.*

**A Remarkable Clock.**—The *Scientific American* describes a "remarkable kind of clock which recently has been imported, and put on exposition in New York City, consisting of a glass disk with the figures of the hours on it, and hour and minute hands loosely slipped on a pivot in the center. The hands can be taken off, and no works whatever are visible, nor can any connection of the hands with anything be seen, notwithstanding that the hands point always to the right hour and minute; and even when turned round or even whirled by hand they will, after some revolutions and oscillations, come back to the right place. They are well called mysterious clocks, and spectators are assured that they are not moved by electricity. This is true; and the whole secret is in the counterpoise of the hands, each of which has a heavy arrow point at the long end, and at the short end a hollow round box. In this box are the works of a watch, which are so placed as to leave an annular space between them and the circumference of the box; and in this space is a counterpoise which is connected with the works so as to revolve once in twelve hours for the hour hand, and once in an hour for the minute hand; the revolution of the counterpoise inside the box shifts the center of gravity of the hand, so as to give the hand, successively, the necessary direction."

**Fatigue.**—In order to understand the influence of an irregular expenditure of force, we need only to remember that when greatly fatigued we lose our appetite, and that when the stomach is full of activity, the limbs are indisposed for performing hard work. Insufficient nourishment and fatiguing work, during the period of growth, stop the corporeal development of the individual.—*Liebig.*



## BIBLE HYGIENE.

BY ELD. JAMES WHITE.

It is not the object of these articles to plead the divine authority of the Sacred Scriptures, though the writer is a full believer that they were inspired of God. The Bible is the highest authority with many of our readers. They unhesitatingly accept it as the rule of life. Others do not. Both classes, however, if they are friends of the health reformation, will have a lively interest in our efforts to show the harmony existing between the teachings of the Bible and the pure principles of hygiene. The latter will be gratified that objections are being removed from honest minds that have been under the delusion that the Bible is opposed to our views of health reform, and the former will doubly rejoice for the same reason, and also to know that their good Bible and science are not at swords' points.

With a large portion of the people, the Bible is the safest authority in all matters of truth and duty. Prove to Christian men and women, who fear God and tremble at his word, that existing reformatory movements are in strict harmony with the teachings of the Sacred Scriptures, and they will no longer regard the subject as unworthy of their notice. But the very general impression that the restrictions of the hygienic practice are not sustained by the Word of God, has placed many sincere Christians where it is difficult to reach them.

The eccentric Lorenzo Dow once said that prejudice was like a cork in a bottle; it would not let anything out, neither would it let anything into the bottle. So blind prejudice will blockade the mind, and not allow errors to pass out of it, nor the plainest truths to enter into it. And it is asking too much when we say to men, "Give up your prejudices." But few could do this, should they try. In fact, they have a right to their prejudices if held subordinate to reason.

A sane condition is one in which passion and prejudice are controlled by reason. And just so far as reason is controlled by prejudice, passion, and appetite, just so far are men and women insane. There are but few per-

fectly sane persons in our day. We do not ask men to surrender their prejudices; but in the name of reason and religion, we do invite Christians to so far waive their prejudices as to be qualified to weigh evidence in the scales of reason and justice.

God is love. He formed man and gave him life for his own glory, and for the highest good of the creature, man.

The record of man's creation, his ample provisions, and his glorious surroundings, fully attest the love of God to created intelligences in this life. "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul. And the Lord God planted a garden eastward in Eden; and there he put the man whom he had formed. And out of the ground made the Lord God to grow every tree that is pleasant to the sight, and good for food." Gen. 2:7-9.

We go back to the formation of the first man to learn the design of God respecting the race. He was formed in the image of his Creator to be lord of the work of his hands. Adam was God's best work. Physically considered, he must have been very grand. "God saw everything that he had made, and, behold, it was very good." This was true of the first man in every sense, physically and intellectually.

The God of the Bible manifested his love for the beautiful by placing in holy Eden those trees, shrubs, and flowers that were pleasant to the eye. He planted also this holy impulse in the minds and hearts of the first pair, and adorned their Eden home with these glories of nature for their delight. As we have viewed the specimens of his delicate work, fashioned and tinted by his finger, gorgeously displayed in the floral department of the American Centennial Exhibition, and spread out on the slopes and in the valleys of the Rocky Mountains, we have been led to exclaim, What must Eden have been before sin entered!

The delight of taste is also one of God's blessed gifts. Six thousand years ago the God of the Bible founded the vegetarian system in causing every thing that was good for food to grow from the soil. Adam's bill of fare reads thus: "I have given you every



herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat." Gen. 1:29.

Our good Bible does not record flesh, fish, or fowl, as constituting a part of Adam's bill of fare. In fact, these are entirely omitted. As true as the book of Genesis, that first venerable gentleman, who lived nearly one thousand years without either the dyspepsia or the gout, was a vegetarian.

We behold happy Adam, in holy Eden, walking and talking with God, the great originator of thought, and communing face to face with his Son, and with the holy angels. He was the companion of the highest order of intelligences. Adam and his sons, until the time of the flood, lived nearly one thousand years. Noah lived nine hundred and fifty years. And, certainly, judging from the sacred record, from creation to the flood was a time of remarkably good health. During that long period of 1656 years of vegetarian life, no mention is made of the sickness and death of children, of feebleness of youth or of middle age, or of fevers, dyspepsia, gout, or consumption. All lived in the full enjoyment of health nearly one thousand years, until the weary springs of life stood still. Obituary notices of that time do not mention local diseases, caused by the breaking-down of certain organs of the system while others remain strong, resulting in lingering sufferings and agony in death. No, they mention the great length of human life, and close thus:—

"And all the days that Adam lived were nine hundred and thirty years, and he died."

"And all the days of Seth were nine hundred and twelve years, and he died."

"And all the days of Enos were nine hundred and five years, and he died."

"And all the days of Cainan were nine hundred and ten years, and he died."

"And all the days of Mahalaleel were eight hundred ninety and five years, and he died."

"And all the days of Jared were nine hundred sixty and two years, and he died."

"And all the days of Methuselah were nine hundred sixty and nine years, and he died."

"And all the days of Lamech were seven hundred seventy and seven years, and he died."

**Cruelty to Animals.**—One of the considerations which the advocates of flesh-eating never take into the account, is the gross cruelty to animals which is entailed by the use of animal food. This abuse of the brute creation is not only immoral and repulsive in itself, but it becomes the source of great injury to the users of flesh food. The cruelty to which animals are subjected in the process of slaughtering or of transportation renders their flesh unfit for food in an eminent degree. The *Dietetic Reformer* quotes the following eloquent paragraph from one of Macgregor's works, in which the sufferings of helpless brutes during transportation are well painted:—

"Oh, the roast beef of old England! The sad twinges borne by that 'undercut' before we eat the sirloin in London—the Slesvig thumps to drive it to a pen on the Weser, the German whacks to force it up a gangway on board, the haulings and shoves, the wrenchings of horns and screwing of tails to pack it in the hold of the steamer, the hot thirsty days and cold hungry nights of the passage, the filth, the odor, the feverish bellowing, and the low dying moan at each lurch of the sea—who can sum up these for one bullock's miseries? And there are thousands every day. If a poor bullock becomes at all *sea-sick*, he *speedily dies*. If he is even weaker than his unhappy companions, and lies down after two days and nights of balancing on sloppy, slippery boards, he is trampled under the others' hoofs, and squeezed by their huge bodies, and suffocated by the pressure and foulness. Through the livelong night, while we Christians on board are sleeping in our berths, these horrid scenes are enacted. Morning comes, and the dead must be taken from the living. A great boom is rigged up and a chain is let down, and the steam-winch winds and winds it tight and straining with some strong weight below, far, far down in the lowest of the three tiers, where no light enters, and whence a Stygian reeking comes. Slowly there come up first the black, frowning, murdered head and horns, and dull blue eyes and ghastly grinning face of a poor dead bullock, then his pendent legs and his huge, long carcass. To see the owner's mark on his back, they scrape away the slush and grime, then he is swung over the sea, and a stroke of the axe cuts the rope round his horns. Down with a splash falls the vast, heavy carcass; £20 worth of meat floats on a wave or two, then it is engulfed. Another, and another, and twenty-two are thus hauled up and cast into the sea, and this, too, *on the first day of a very calm passage*. What in a storm? Oh, the roast beef of old England!"



# THE HEALTH REFORMER

BATTLE CREEK, MICH., FEBRUARY, 1877.

J. H. KELLOGG, M. D., EDITOR.

TERMS, \$1.00 A YEAR.

## How to Treat Diphtheria.

JUST now this disease is raging with great fatality in numerous localities, and the newspapers are, as usual, filled with the most absurd directions for treatment of the sufferers with all kinds of poisonous compounds and caustic applications. Under the modes of treatment commonly prescribed, diphtheria is one of the most fatal diseases incident to childhood. Adults not infrequently succumb to its insidious influence, but children are the most frequent sufferers. Thousands are yearly sacrificed to incorrect methods of treatment. When proper remedies are employed, fatal cases are rarely met.

The disease may commence with a sudden chill, followed by a high fever, or its beginning may be gradual, being accompanied by feelings of general discomfort. The local manifestations of the disease are usually in the throat, upon the fauces, tonsils, and soft palate. These parts are at first reddened; then they become swollen, and whitish patches of false membrane appear upon them. Sometimes the irritation and the false membrane extend over the whole surface of the mouth, into the nasal cavity, and down into the oesophagus and trachea, adding greatly to the gravity of the affection. Particles of mucus should not be mistaken for false membrane. The former can be easily removed, while the latter adheres quite firmly until it is loosened by ulceration.

The throat affection usually receives the chief attention, but it is, in reality, not the disease itself, but only one of the results of the disease. Proper treatment should be applied, not only to the throat, but to the whole body.

As soon as the first symptoms of the disease appear, begin treatment in a very energetic manner. If the patient is an adult,

give him a warm sitz bath for about twenty minutes. Surround him with blankets during the bath so as to favor perspiration. The feet should be placed in a hot foot bath in the meantime, and the head should be frequently wet with cool water. After the bath, quickly sponge the whole body with water a little cooler than that of the bath. Then put the patient to bed and cover him up warm. Keep the feet warm, cool the head by frequent bathing, and sponge the whole body every hour or two with tepid water if the patient is very feverish.

If the patient is a child, a warm pack will be preferable to a sitz bath. Wring a woollen sheet out of water a little more than blood-warm. Spread it quickly upon the bed, place the patient upon it and quickly envelop him. Then wrap him snugly with dry blankets and let him sleep for half an hour if he feels so inclined, as he usually will. Follow the pack by tepid sponging as directed after the sitz bath.

After putting the patient to bed, apply, alternately, hot fomentations and cold compresses. Fold a flannel cloth twice, so as to give four thicknesses, wring it out of water as hot as can be borne dry enough so that it will not drip, and apply at once to the throat. After a lapse of three to five minutes, apply a cold compress for the same length of time. Then re-apply the fomentation, and continue to alternate until each has been applied four or five times. Then apply a cool compress and change it as often as it becomes warm.

In ordinary cases, it will be sufficient to wet the cool compress in the coldest well water that can be obtained; but in cases in which there is great irritation of the throat, snow or pounded ice should be applied, being placed between the folds of the compress.

By all means avoid the use of all of those caustic applications which are so commonly



employed in this disease. When white patches appear in the back part of the mouth, touch them every two or three hours with pure lemon juice, using a swab of soft linen or sponge attached to the end of a lead pencil or a small stick.

If the patient is old enough, some relief will be given by using a gargle of water acidulated with vinegar. Another excellent gargle which destroys the vegetable parasites always present in this disease is a solution of permanganate of potash. The crystals can be obtained of any druggist. Place two or three in a glass of water, and stir until they are dissolved. The fluid should not be taken into the stomach, though no harm will result if a few drops are swallowed.

The sick-room should be well ventilated, in order to carry away as rapidly as possible the foul germs which result from the disease, and thus prevent their re-absorption into the blood. The diet should be plain and light, though enough should be given to sustain the nutrition of the patient. Oatmeal gruel and mild fruits are usually well received. Milk may be employed when the patient has been accustomed to its use. The same regularity in meals should be observed as in health.

With such treatment, fatal cases will be very rare indeed. We have never known a patient to die when such treatment was applied faithfully from the first.

#### Utility of the Galvanic Bath.

ELECTRICITY has long been recognized as one of the most efficient of therapeutic agents. Its uses are varied, and its results are often surprising. One of the most effective modes of applying it is by means of the electric bath, in which the current is applied to the whole surface of the body through the medium of water. One of the most remarkable results of this bath is its effects in the removal of mineral poisons from the body, especially minerals which have been taken as medicines. Mercury is often left in the system in large quantities. An Italian professor of medicine used to exhibit the leg bone of a patient whose system had been charged with mercury by its use as a medicine. The mineral was so abundant that minute drops of the fluid

metal ran out upon the table when the bone was slightly struck upon it.

In most cases, minerals are left in the body in a state of combination, and are not removed on account of the insoluble character of the compounds. The galvanic current decomposes these compounds, and thus enables the system to eliminate the poisons. Persons who have been salivated are greatly benefited by this bath. The following case, related by the *Boston Journal of Chemistry*, well illustrates the effect of the galvanic bath:—

“A case of extreme plumbism [lead poisoning] has been satisfactorily treated at St. Mary's Hospital, London, by means of the galvanic bath. Dr. Handfield Jones bears testimony to the fact that traces of lead were found in the water after the immersion of the patient, whereas they could not be found in a bath prepared in an exactly similar manner, but into which the patient had not been put. The medical galvanist asks, pertinently, If lead, why not arsenic, mercury, etc.? The facts remain, however doubtful may be the evidence as to the lead being extracted from the man's body, that the patient was six months under ordinary treatment without any appreciable benefit, and that a few galvanic baths sufficed to set up a recuperative effort of nature, which, by perseverance, resulted in the man's being able to return to work, though, from the extreme nature of the case (he was all but a skeleton), a ‘cure’ was scarcely expected. Lead colic and dropped wrists in the simpler forms are cured by the galvanic bath in a few days.”

#### The Use of Fruits.

THE numerous excellent fruits which our country affords are quite too sparingly employed as articles of diet by most people. Fruit is used as a luxury, not as a food. Instead of being eaten at the table as a part of the meal, it is usually eaten between meals, and is thus made the means of harm instead of benefit. Fruit should be made a part of the meal as well as any other article of food. Many people eat fruit only for dessert, after having already fully satisfied the demands of nature with other food. Taken in this way, fruit is often an injury, since it leads the in-



dividual to eat more than his system needs, and more than he can digest properly.

Fruits are really nutritious articles of food, though the proportion of nutriment contained in them is not so great as that found in most grains. Individuals have frequently demonstrated the nutrient value of fruits by living upon a purely frugivorous diet for a protracted period.

Fruits are especially valuable as articles of food for those who are suffering from inactivity of the bowels and kidneys. There is no better regulator of the bowels than fruit liberally used. The liberal use of fruit during the winter season will prevent spring biliousness by keeping the liver and bowels in good condition.

There are few persons who cannot use fruit in some form. Many invalids with weak stomachs are obliged to forego the use of such acid fruits as cranberries, cherries, currants, and very sour apples; but they may employ sweet and subacid apples, raspberries, strawberries, grapes, and other sweet fruits, with impunity. Those who cannot use raw fruit should eat it cooked in some simple way. A baked sweet apple will hardly disagree with the most rebellious stomach.

Sour fruits may be made palatable by the addition of a small quantity of sugar, or by the use of such sweet fruits as dates, raisins, figs, etc. Fruits are generally spoiled by the addition of too much sugar. While it is probably true that a small quantity of sugar may be appropriated, it should never be used in greater proportion than that in which nature affords it. Hence, it is a little safer to employ sweet fruits as a means of sweetening more acid ones rather than to use sugar in the commercial form, there being less liability to use it in excess when taken in this way. Nevertheless, too much of the saccharine element may be taken even in the form of sweet fruits. Such fruits as dates and figs need to be eaten with moderation. We have often seen individuals suffer habitually from indigestion when the sole cause was the too free use of dates.

Numerous simple recipes for the preparation of fruit in a perfectly wholesome manner may be found in the work on hygienic cookery published at this Office, entitled, "Healthful Cookery." Price, 25 cents.

**Beware of Quacks.**—It is astonishing with what readiness persons will trust their lives in the hands of individuals who give no evidence of having any sound knowledge whatever of the human system or the diseases to which it is subject. People seem to use their good sense upon this subject less than upon any other. If a man is to be employed to mow, or thresh, or dig a cistern, or build a house, the employer takes good care to see that the applicant for employment understands his business; but such precaution is seldom taken in the selection of a medical adviser. If an ignorant Dutchman, a half-civilized Indian, or a traveling quack, recommends a certain decoction or compound, it is swallowed unhesitatingly and without any knowledge of its real nature. It may be a drug of the most deleterious character; but the unsuspecting patient knows nothing of it until he finds himself suffering from the injury inflicted. The sooner people learn to use the same good common sense in relation to matters pertaining to health that they use in regard to other matters, to trust their lives in the hands of those only who have acquired by patient study the fitness to bear so grave a responsibility, the better it will be for humanity, and the sooner quacks and charlatans will be compelled to procure a living in some more honest manner than in trying dangerous experiments on human life.

There are hygienic quacks as well as drug quacks. Like the latter, they are chiefly distinguished by their ignorance. As a general rule, this class of quacks advocate very strenuously some most extreme and impracticable measures in diet or medical treatment. Beware of them.

**Unfortunate Porkers.**—Hog cholera is threatening to exterminate the porcine race in some portions of the country, a result which might not be so very disastrous to the race as some interested farmers might imagine. The disease seems to be especially prevalent in Iowa and Indiana. The following excerpt from a letter from a friend in Indiana may serve to open the eyes of some of those who unsuspectingly employ as food some of the products of diseased swine.

"The 'hog cholera' rages fearfully here, yet



the soap-factory is full of dead hogs. But the greatest imposition yet is a large establishment in the city which is daily manufacturing these cholera hogs into lard, and stamping their barrels 'prime steamed lard.' Hundreds of barrels are shipped from here."

Hog cholera was at one time supposed to be the same disease as trichinosis. Although it is now known that this is not the case, the disease is bad enough to condemn affected hogs as food in any form. At his best, the hog is only a filthy scavenger, and totally unfit for human consumption as food.

Now is a good time to circulate tracts on the subject of animal food, and especially the use of pork.

**English Reform Societies.**—Our English friends are certainly far in advance of us in the organization of reformatory societies. They have not only numerous temperance societies, but a Vegetarian Society, which labors to secure the disuse of animal food, and an Anti-Tobacco Society, all in active operation. At a recent meeting of the latter society, an address was delivered by Mr. Isaac Pitman, the inventor of phonography, who has for many years been foremost in nearly all movements looking toward reform.

**Chinese Physicians.**—The Chinese see their physicians in a much more sensible manner than do most other nations. Their plan is to pay the doctors for keeping them well, rather than for curing them when ill. When a Chinaman gets sick, the pay of his physician is stopped until he is well again; hence it is greatly for the advantage of the pig-tailed doctor to cure his patient as soon as possible, and then to keep him well. If American physicians were paid for their services in the same way, there would be a remarkable decrease in sickness.

One would think, from the remedies used by Chinese doctors, that they took occasion to chastise their patients for being sick, and thus depriving them of their fees, by administering as remedies the most abominable and disgusting articles. The following are a few of the articles which were exhibited in the Chinese department at Philadelphia as medicines:—

The lining membrane of a fowl's gizzard,

dried, for dyspepsia; dung and beetle-skins for skin diseases; snake-skin for small-pox; fragments of fossil crabs, used for diseases of the eye; dried toads to cause sweating; maggots, for delirium; oyster shells, for deafness; decoction of dried leeches, for a purgative, with numerous similar articles, some even still more nauseating than those mentioned.

**London Butter.**—The rigid inspection of foods necessitated by the English laws against adulteration has developed some very unpalatable facts respecting the manufacture of artificial butter. This article is described as consisting of "horrible concoctions of old lubricating tallow, and even old tallow candles minus the wicks, which an official analyst describes as supplied to the poor in the last stages of rottenness. One factory was detected making this delectable compound at the rate of two tons a day."

**Bad Air.**—At the present moment, thousands of people are taking the most scrupulous care to exclude as much as possible of the enlivening, invigorating atmosphere of winter out-of-doors. In other words, to tell the truth plainly, they are doing their best to smother themselves to death. Perhaps one reason for this misdirected caution is that the people have been misinformed. Dr. Hall, a writer who said and wrote a great many excellent things, claimed that "it is safer to sleep in bad air all night with a temperature over fifty, than in pure air with a temperature under forty." Every-day experience teaches us that this is a grave error. The system can readily supply a deficiency of heat from its own resources; but it cannot in any way make up for a deficiency of pure air.

Ample ventilation is needed at all hours; but especial attention should be paid to ventilation during sleep. There is no danger in having a sleeping apartment well ventilated provided one sleeps warm, being well protected by an abundance of blankets.

SPANISH peasants, who are noted for great endurance, subsist almost exclusively upon soup prepared from a kind of pea very closely resembling the lentil.



## PEOPLE'S DEPARTMENT

Devoted to Brief Discussions of Health Topics, Individual Experiences, and Answers to Correspondents.

### Results of Hygienic Treatment.

MANY persons urge, as a last argument against the hygienic system of living and of treating the sick, that while it is very beautiful and consistent as a theory, it is, practically, a failure. It is very probable that the statement is made, in many cases, with a firm belief in its truthfulness, the individual's opinion being based on the observation of certain cases in which there has been an evident failure. Such persons need to be informed that many who profess to employ hygienic remedies, and many institutions which claim to be hygienic in character, do not properly represent the system. Hence the system should not be charged with individual failures.

When rightly employed, there are no other remedies which in any degree equal hygienic agents in potency. As proof of the efficiency of hygienic treatment we cite the following cases from hundreds of similar ones successfully treated at the Health Reform Institute, a Medical and Surgical Sanitarium located in this place:—

Miss B. C——, age twenty-one years. Had been a bad dyspeptic for more than five years. Stomach exceedingly inactive. Extreme flatulence. Excessive nervousness. Weight seventy-seven pounds. Previous weight, one hundred and forty pounds. Circulation very poor. Obstinate constipation. Menstruation suppressed, with other uterine derangements. Her father, a physician, had exhausted his skill, and given up all hope of her recovery. Improvement began with the commencement of treatment, and steadily continued until she left, after a few weeks of treatment, having gained twenty-five pounds in flesh. Her digestion, circulation, and nervous system, were restored to normal conditions. She continued to improve after returning home until she attained her usual weight, and continues well to the present time (three years since).

Patient, a banker, age forty-eight. Had been a dyspeptic ten years. Suffered great pain in the head, accompanied with confusion of thought, in addition to the most aggravat-

ing symptoms of indigestion—eructations, regurgitation of food, flatulence, and great constipation. Was very desponding, his mental disturbance being so great that his friends thought very seriously of sending him to an insane asylum. After a few weeks' treatment he returned to his home in good health and cheerful spirits, and now reports himself (six months later) as "perfectly sound."

Miss K——, age nineteen, had suffered from prolapsus of the uterus of the second degree for five years, during which time she had been a helpless invalid, able to walk but a few steps. Had numerous pains, dyspepsia, and cough, as accompanying symptoms. After a few months' treatment she returned home comparatively well, and by engaging in out-of-door employment attained unusually robust health.

Mrs. A. B—— had suffered from severe uterine congestion, prolapsus, and ulceration. Had tried various kinds of treatment, but continually grew worse until she became entirely prostrate, being unable to walk more than a few steps. Under treatment, she improved so rapidly that in three weeks from the beginning of treatment she walked two miles with ease, and after six weeks doubled the distance.

**For what Was it Made?**—When you expostulate with men for using tobacco, about the first and only argument they have is this question, which is always on their tongues: "Well, then, what was it made for, if it was not made to use?" And so you talk to a toper, and he is on hand with the same argument: "If you should not drink it, for what was it made?" And so they say of tea and coffee; and even the man who eats the dead hog, looks very wise and asks you the same question: "Why, if we don't eat the hog, what was it made for?"

Well, gentlemen, I suppose you mean to argue that you must eat everything for which you can find no other use. This is a sound argument indeed! Let us take a walk. Look, there goes a toad; let us catch him, kill him, dress him, and serve him up for dinner! Certainly, that must be for what he was made, for I never saw him put to



any other use. But we are not through. Look out! there is a streaked snake. We will get him if we can and put him in to add to the flavor of the toad. Let us pass around to that pond; there, quick, there goes a lizard! We will gobble him up, because, you know, he was certainly made for something, and I cannot conceive of any other earthly use to which he can be put, so let us eat him. And now let us go through the woods and see what we can find there. Hark! I hear a turkey-buzzard; let us sack him and try his broth for supper. Men do not make any other use of him, and certainly, therefore, he must have been made to eat. Probably he will be a little tough and blue, and may be a little strong; but no doubt we shall get used to that by and by. There grows a tall mullen stalk! I never saw the mullen raised for flowers, nor cultivated for seed. The cattle never eat them, the hogs won't touch them; but there are plenty of them, and it must be our duty to eat them, so we put them in for seasoning!

Now, my friend, shall we not have a delicious dish? Well, sir, if you believe your own argument, that you must eat everything God has made, you had better commence on these. But there, you are ashamed of this argument now, so I will not urge it any further.

D. M. CANRIGHT.

**Getting Posted on Health Reform.**—People generally consider themselves so well informed on matters relating to health that they have no need to study or read on this subject. One has Gunn's medical directory; another has read a work on health, which belonged to his great-grandfather; another has a medical dictionary or almanac; another has a brother who is a doctor, or he has himself read or studied a work on medical practice. Some in one way, some in other ways, almost all are perfectly satisfied to remain *in statu quo*.

The light at present shining on health reform is to these persons like the fiery pillar which went between the Israelites and the Egyptians; while it gave light to the people of Israel, it was darkness to those who came up with the Egyptians in the pursuit. Those who carelessly fall behind and range themselves with the opponents of reform, are in the same danger as the Egyptians of getting in the dark.

The only way is to read the REFORMER, as it comes to us monthly, fresh from the types, freighted richly with healthful truths and wholesome regulations. And we need to keep right on reading it every month, for this subject is endless in its bearings and its influ-

ences for good. New dangers, new perils, arise in this world of ours, and good health is one of the best and most precious of treasures, of which lust, avarice, pride, appetite, and passion would despoil us.

If we would persevere in reform, we need often to read, often to think, of the subjects connected with it; for it is with this as with religion, nothing so soon escapes the memory as those points which relate to health, inculcating self-denial.

Good health is "the right arm of power" to any cause; and sickness and disease are the enemies which lurk in secret to overthrow and to pull down. Do not, then, be content with the pills and powders of the drug-store; but arouse to see if there is not a better way. A regular pulse, a painless body, a bright eye, a steady hand, an even temper, are beyond price.

JOS. CLARKE.

**Changed his Mind.**—A subscriber writes:

"I almost concluded to do without the REFORMER for one year in order to do a little more for the R—, to bridge it over the hard times. But when I reflected, I changed my mind. I am under everlasting obligations to our dear REFORMER for teaching me how to save money by saving and improving my health; so I think I can take it and then do just as much for our religious paper."

How many of our subscribers will change their minds when they think of suspending the REFORMER for a year? All, we hope; for no one who wishes to keep well can afford to be without it.

## Questions and Answers.

**Overeating, etc.**—A subscriber asks: 1. How may a person judge when he has eaten enough? 2. How much food does it take for a person per day?

*Ans.* A person should stop eating before the stomach feels uncomfortably full from the ingestion of food. A healthy appetite will be appeased when a sufficient quantity of food has been taken into the stomach. 2. A few experiments will teach each person just how much food he should take. No exact rule will answer for all. Cornaro is said to have attained very advanced age on a diet of 12 ounces a day of solid aliment. We have worked hard for several consecutive months on an average of 17 ounces of vegetable food (solid aliment) per day, and gained several pounds in weight during the time. The



amount of nutriment necessary to supply the waste of the tissues depends upon the amount and kind of work done. Active muscular exercise, combined with great mental activity, creates a demand for the greatest quantity of food.

**Cramp.**—E. B. L. inquires, What is the best thing to do for the cramp?

*Ans.* Cramp in the limbs can usually be speedily removed by strong pressure over the affected part. Hot fomentations, or alternate applications of heat and cold, are excellent remedies.

**Bronchitis.**—O. W., Me., wishes a remedy for "bronchial catarrh."

*Ans.* Bronchitis is a very obstinate disease, but cases have recovered rapidly under hygienic treatment. Local treatment alone will not effect a cure. The chest compress, worn nights, a pack once a week, a tri-weekly sponge bath, and a wholesome diet, will probably do all that can be done for you at home. You ought to have a thorough course of treatment.

**Chronic Ulcer of Nose.**—W. H. W., N. Y., complains of a chronic soreness of the nose mostly confined to the interior, and accompanied by heat and a smarting sensation. Wishes to know what more he can do for it besides attending to the good advice given in the HEALTH REFORMER, the "Household Manual," etc.

*Ans.* You should at once consult an efficient surgeon respecting the nature of the sore. It may be malignant in character, and will then require very radical treatment.

**Electric Soles.**—D. M., Neb., inquires whether electric soles or bands are of any benefit.

*Ans.* No.

**Sick or Lazy?**—M. L. H., Cal., complains of constant chilly sensations which persist in spite of warm clothing. Her hands, feet, and limbs "get asleep" when retained in a fixed condition for a short time. Has soreness in lungs and harassing cough. Wishes to know whether she is sick or lazy.

*Ans.* Sick. The circulation is very defective, and is easily obstructed by a constrained position, producing the sensation popularly known as being "asleep." You need abundant out-of-door exercise. Live out-of-doors as much as possible. Eat abundance of nourishing hygienic food, and take a general bath twice a week. You should not take a pack more often than once in two weeks. The ill

effects subsequent to the pack were probably due to deficient reaction.

**Amaurosis.**—M. S. T. asks if there is any cure for a lady who is blind in one eye from what the doctors call amaurosis.

*Ans.* We could not tell certainly without having the opportunity to make a personal examination. Amaurosis is made, by many physicians, to cover such a variety of diseases of the eye that we cannot tell, with certainty, anything about the prospects of recovery.

**Digestion—Meals, etc.**—L. Wis., inquires: 1. As digestion goes on after death, is it not a chemical instead of a vital process? 2. At what hours of the day should the two meals be eaten? 3. Is honey wholesome? 4. What should be the diet for a person suffering from flur albus? 5. Would you advise a daily bath in tepid water, and a walk of a mile each morning? 6. Is there not nutriment in beef? 7. Is not white bread wholesome as far as it goes? 8. Do you advise two meals a day and no lunch? 9. Do apples tend to counteract biliousness?

*Ans.* 1. No; the tissues do not die so soon as the individual or somatic life ceases, hence many vital actions, as muscular contraction and digestion, may continue for a brief period after death. 2. 8 A. M. and 2 P. M. are good hours for those who take but two meals a day. 3. Honey is not so wholesome as other sweets, because it contains various impurities gathered from flowers and other sources. 4. Anything consistent with a wholesome vegetarian dietary. 5. Yes; for an individual with good general strength. 6. Yes; beef is food, but not the best food. 7. White bread is unwholesome simply because it does not go far enough. It lacks some of the most essential elements of the grain. 8. Yes; for most persons. 9. Apples have no medicinal properties whatever; but, like all other healthful articles of food, they favor the healthy action of all the vital organs by supplying wholesome nutriment. They do not "act on the liver."

**Hernia.**—H. H., Cal., asks what to do for a child ten years of age who has had a rupture since the age of three years, and has worn a truss without any apparent benefit.

*Ans.* The only remedy is wearing a proper truss. This will sometimes effect a cure in children if the truss is skillfully adjusted. She should by all means continue the use of a truss, taking care to secure one adapted to her condition.

**Soft Water and Lead Pipes.**—E. E. T., O., asks if soft water is injured by passing through lead pipe.



*Ans.* Yes; and the softer the water, the greater is the injury which it suffers by contamination with lead. Avoid lead pipes as much as possible.

S. E., N. H.: It is possible that the lady is suffering from an ovarian tumor. She should receive a careful examination from a competent surgeon at as early a day as possible.

D. H. L.: The gentleman presents some of the most unfavorable symptoms of paralysis, and it is somewhat doubtful whether an entire cure could be effected. Still, it would be wise for him to make a thorough trial of hygienic treatment before giving up his case as hopeless. Electricity and Swedish movements are the special methods of treatment required in his case.

Mrs. M. G. O.: Your case demands more skillful treatment than you can obtain at home. You should go to a good institution where you can receive hygienic treatment, as soon as possible, for you need immediate attention.

M. A. W., Iowa: 1. There is not very much danger that the influenza will "run into consumption." It will be more likely to end in catarrh. 2. The little girl is suffering from what is usually termed scrofula, per-

haps has spinal disease in addition. Give her a warm bath when she is suffering most. Keep her out-of-doors as much as possible, and make her diet hygienic. 3. We know of no reliable institution nearer to you than the one at this place.

T. O. D., Minn.: We are sorry we cannot prescribe for you, but your case is so complicated that we dare not encourage you to think of getting better under home treatment. You need the personal attention of a skillful hygienic physician. We would advise you to place yourself under the care of such a physician as soon as possible.

S. M., Oregon: We should be unable to give in the journal all the details you require concerning the care of young infants. You will find the information you desire in the "Mothers' Hand-Book," a copy of which will be sent, post-paid, for \$1.00.

K. M. T.: There are no absolute rules for applying electricity. The frequency of application must depend on the condition of the patient, temperament, and other circumstances. The hours of application must also be varied to suit the patient's requirements. In some cases an application is best made about bed-time. In others, about the middle of the forenoon.

## FARM AND HOUSEHOLD?

Devoted to Brief Hints for the Management of the Farm and Household.

—Furniture in constant use may be rejuvenated wonderfully by the employment of a little linseed oil with a bit of woolen cloth.

—Knives are often stained by fruit or vinegar. The stains can be removed by rubbing them with a piece of raw potato before they are cleaned on the board.

**Baking Bread.**—A recent writer on cookery recommends the use of an ordinary flower pot as a very superior baking-dish.

**Mending Kettles.**—A correspondent sends the following recipe for mending holes and cracks in kettles. Gather the anvil dust in a common blacksmith shop, and sift out the finest. Clean the edges of the crack or hole very thoroughly. Mix the dust with the white of an egg to make a paste of the thick-

ness of cream. Heat the kettle quite hot, and press the mixture into it.

**Keeping Apples.**—Apples ought to have as sweet an air in their winter home as any other kind of food. They take in, very readily, the musty odors of close, moist cellars that are little better than vegetable pits; and the difference between a crisp, high-flavored apple, and one that is flabby and poor, is often simply the difference in the storage which they have had. This fruit needs gentle handling, a cool, dry room, just safely above the freezing point, and removal from all rank vegetables or unpleasant odors. Let our fruit-growers remember this.—*Germantown Telegraph.*

**Carrots Instead of Eggs.**—It is not generally known that boiled carrots, when



properly prepared, form an excellent substitute for eggs in puddings. They must, for this purpose, be boiled and mashed and passed through a coarse cloth or hair-sieve strainer. The pulp is then introduced among the other ingredients of the pudding, to the total omission of eggs. A pudding made up in this way is much lighter than where eggs are used, and is much more palatable. On the principle of economy this fact is worthy of the prudent housewife's attention.—*Sel.*

**To Make Boots Durable.**—The durability of the soles of boots and shoes may be greatly increased by coating them with gum-copal varnish, which also has the effect of making them water-proof. Four or five coats should be given, allowing each coat of varnish to dry before the succeeding one is applied. Soles thus treated possess twice the usual durability, and generally outlast the best uppers. The leather uppers of boots or shoes may be rendered soft and water-proof by rubbing into them while warm, before the fire, a mixture composed of four ounces of hog's fat and one of resin.

**Chapped Hands.**—One of the most disagreeable consequences of cold weather, for many people, is the chapping of the hands incident to exposure to a cold, raw air, without protection. There are several good applications which will prevent chapping.

1. After washing the hands, when nearly dry, dust them thoroughly with powdered starch. Rub them until the superfluous starch is removed, and they will not chap.

2. Bathe them several times daily in water in which oatmeal has been thoroughly boiled.

3. After washing the hands, while they are still quite moist, apply to each a small quantity of glycerine and rub it in very thoroughly.

**Hardness of Wood.**—In general, the value of wood as fuel depends upon its hardness. A knowledge of the comparative value of different kinds of woods will be found a great convenience. In the following table, which we quote from an authentic source, shellbark hickory is taken as the standard with which other varieties of wood are compared:—

Shellbark Hickory,...	100	Yellow Oak, .....	60
Pignut Hickory, .....	95	Hard Maple, .....	59
White Oak, .....	84	White Elm, .....	58
White Ash, .....	77	Red Cedar, .....	56
Dogwood, .....	75	Wild Cherry, .....	55
Scrub-Oak, .....	73	Yellow Pine, .....	54
White Hazel, .....	72	Chestnut, .....	52
Apple-Tree, .....	70	Yellow Poplar, .....	51
Red Oak, .....	69	Butternut, .....	48
White Beech, .....	65	White Birch, .....	43
Black Walnut, .....	65	White Pine, .....	20
Black Birch, .....	62		

**A Harmless Cosmetic.**—Thousands of people are ever on the lookout for some new compound or cosmetic with which to improve their complexion. Many of those in common use are dangerous on account of their poisonous character. Here is a cosmetic that is perfectly harmless, and quite as efficient as any other: Take a table-spoonful of oatmeal, place it in a quart of water, and allow it to soak over night. In the morning, place the mixture upon the stove and allow it to boil one hour. Place it away to cool, and apply to the face at night upon going to bed. Allow it to remain upon the face over night, washing it off with snow or rain water in the morning. Its efficiency will be increased by applying it two or three times a day, and washing off when dry.

**To Fasten Leather to Metal.**—A successful method of affixing leather to metal, so that it will even split before it can be torn off, is said to be practicable by means of the following composition: A quantity of nut-galls, reduced to a powder, is dissolved in eight parts of distilled water, and after remaining for six hours, is filtered through a cloth. This decoction is to be applied to the leather. A similar quantity of water is then taken, and one part by weight of glue added to it, this latter to be held in solution for some twenty-four hours, and then it is applied to the metal, which should first be roughened and heated. The leather is now carefully laid upon the surface of the metal and dried under pressure. The union of the materials produced by this method is said to be exceedingly tenacious.

**Care of Horses' Feet.**—The following sensible suggestions from *Forest and Stream* are well worthy of the attention of all who have the care of horses:—

On an average, horses require shoeing once a month. The length of time a shoe will wear depends much on the kind of service a horse is doing, and on the kind of road he is daily traveling. A team horse in heavy draught does not wear out as many shoes as one used in a hack; quick motion grinds shoes down more rapidly than slow use. Some pavement is harder on shoes than an ordinary road, while the friction of a gravelly road wears them away rapidly. Wooden pavement is but a little saving to the wear and tear of shoes, for the grit and dust which become impacted in the interstices of the wooden block grind away shoes like the friction of an emery wheel. The hind shoes wear



out first, and there is more strain and friction on them than on the forward shoes. It is impossible and improper for a horse to wear shoes more than six weeks, for the growth of the foot shortens the shoe, as well as changes the shape otherwise. The neglect will cause the shoe to encroach upon the soft textures of the foot and produce lameness. . . .

There are but few practical mechanics who have sufficiently studied the foot of the horse. It is not enough to know the anatomy of the foot, and where to insert a nail not to cause pain; but the foot should be studied in the state of nature, before the mechanism of man has by artificial appliances distorted it. The shape of the hoof of the wild horse, or of one which has never been shod, should be taken as a model. The foot is then properly balanced, neither too long nor too broad, but it has adjusted itself to nature, and the muscles and tendons are not strained by travel. Confinement and unskillful shoeing change the anatomical relations of the foot, and the best judgement of the mechanic is often taxed to correct the growing deformity—from unskillful shoeing. When a reasoning, skillful mechanic is found, the horse is safe in his hands; for he only preserves the normal shape of the hoof, and adjusts the shoe to protect it. The frog in the hoof of the horse is placed

there for a particular purpose, and should not be cut by the shoer. If this is allowed, contraction and lameness will follow. The shape and weight of the shoe should be accommodated to the purposes for which it is designed. The track horse requires a shoe lighter and without corks, while the draught horse must have a heavy, broad shoe, with corks, to enable him to obtain foot-hold and travel with the least possible strain.

**Damp Feet.**—This is one of the most prolific causes of mischief; the feet and legs of children are not, in general, sufficiently well protected from wet and cold; some improvement has taken place of late, but too many instances are still seen in want of care in this matter.

It is a melancholy sight, that of a pair of little bare red legs, supporting an undue load of finery above—velvet, furs, and so forth—entirely unneeded for health and comfort; indeed, offering a great impediment to both. Such a sight must call up a wish in any thoughtful, humane mind that the cost of some of the feathers and finery had better been expended on warm stockings to cover those bare legs, and stronger boots to protect those paddling little feet.

## POPULAR SCIENCE?

In this Department Will Be Noted the Progress of Science, New Discoveries and Inventions.

**Birds with Teeth.**—In a recent lecture, Prof. Flower, F. R. S., described many of the curious fossil animals which have been discovered on this continent. Among the most remarkable of these are two or three kinds of aquatic fowls which had rows of true teeth in their bills. The skeletons of these remarkable birds were found embedded in chalk formations.

**What a Plant Did.**—A little plant was given to a sick girl. In trying to take care of it, the family made changes in their way of living. First, they cleaned the window, that more light might come to its leaves; then, when not too cold, they would open the window, that fresh air might help the plant to grow. Next, the clean window made the rest of the room look so untidy that they

used to wash the floor and walls and arrange the furniture more neatly. This led the father of the family to mend a broken chair or two, which kept him at home several evenings. After the work was done, he stayed at home, instead of spending his leisure at a tavern, and the money thus saved went to buy comforts for them all. And then, as the home grew attractive, the whole family loved it better than ever before, and grew healthier and happier with their flowers. Thus the little plant brought a real as well as a physical blessing.—*The Sanitarian.*

**A Curious Mechanism.**—Dr. Siemens has constructed an artificial eye which so closely resembles the human eye that it is sensitive to light, appreciates the differences in color of lights of various hues, shows signs of fatigue when long subjected to the action of a strong light, as does the human eye, recovering itself



by closing its lids for a time, and suddenly closes its lids by automatic action when subjected to flashes of strong light.

The sensitiveness of this remarkable mechanism is due to the action of light upon the electric conductivity of selenium. If there were some means of transmitting the impressions received by this delicate instrument to the brain through the medium of the optic nerve so as to produce the sensation of light, we would have almost a perfect substitute for the human eye, a desideratum much more difficult of achievement than that which has already been attained for the ear, the production of an artificial membrana tympani.

**Why Roots Grow Downward.**—The following experiments, described in Figuier's "Vegetable World," seem to prove that gravitation has some influence in determining the downward growth of the roots of plants:—

"Beans have been made to germinate when placed on the circumference of an iron or wooden wheel surrounded with moss, so as to maintain the moisture of the seeds, and holding little troughs full of mold, open on two sides; the wheel being put in motion in a vertical direction by a current of water, and made to describe many revolutions in a minute. In consequence of this rotary movement, producing the particular force known as *centrifugal force*, the action of gravitation is, as it were, annihilated, and the sprouting seed removed from its influence, is subjected to centrifugal force only. See what occurs: the small stems, which, in ordinary circumstances, would be directed upward, that is to say, in a direction opposite to the action of gravitation, now turn themselves in the direction opposite to the direction of the centrifugal force, or toward the center of the wheel. The rootlets, which, under ordinary circumstances, would bury themselves in the earth, and in the direction required by the laws of gravitation, in reality now point in the direction of the force which has taken the place of gravitation.

"This curious experiment, carried out for the first time by Mr. J. A. Knight, a former president of the Royal Horticultural Society, has been repeated and modified in France by the ingenious naturalist, Dutrochet. He replaced the vertical wheel by a horizontal one, the force of gravitation acting constantly on the same points of the germinating seed; but

as this seed is exposed at the same time to the action of centrifugal force, produced by the movement of the wheel, the rootlets follow an intermediate direction between a vertical one, which would be determined by the power of gravitation, and a horizontal one, resulting from centrifugal force. As the movement communicated to the wheel is increased in rapidity, the angle made by the root with the plane of the wheel becomes more acute also. When this angle becomes nothing, the root is horizontal."

**The Mound-Builders.**—Who were the builders of the curious mounds which are found in numerous localities in the Western States, is a question which has elicited an almost endless amount of discussion without any very tangible results. At the recent Exhibition at Philadelphia there were shown numerous relics of this mysterious race. Skulls which were black and dry with the exposure of centuries excited additional interest in their extinct possessors, but gave no clue to their history.

A writer well remarks: "All that the strictest research has determined regarding this strange people may be told in a paragraph. Their works, in magnitude, dispersion, and uniformity, indicate a numerous population essentially homogeneous in customs, habits, religion, and government. They belonged to a family of men, says one learned antiquarian, 'moving in the same general direction, acting under common impulses, and influenced by similar causes.' No tribe of Indians ever known has attained the social state which would enable them to compel the unproductive labor of the people to be applied to the works we now find. Geological formations, and the condition of the human remains obtained, prove that the monuments of the Mississippi Valley are at least 2,000 years old. And this is all. Who built the mounds, whether their authors migrated to remote lands, or whether they were swept away by a conquering people or by a terrible epidemic or famine, are questions probably beyond the power of human investigation to answer.

"It is curious that, while the cuneiform characters of the ancient people of the East and the hieroglyphics of the Egyptians can now be translated into modern tongues with ease and certainty, American inscriptions still defy the efforts of the antiquarians."



## News and Miscellany.

—The richest nickel-ore deposit known in the world has been found near Lancaster, Pa.

—A terrible fire in Tokin, Japan, recently consumed 5000 houses and destroyed hundreds of lives.

—The new sultan of Turkey has issued a decree abolishing the slave traffic in all his dominions.

—All the members of the famous "ring" of which Tweed was the leader, are now either in jail or in exile.

—In most sections of the country the present winter has been marked by an unusually heavy fall of snow.

—A million barrels of liquor were consumed in Canada last year, costing about sixty millions of dollars, and resulting in the death of 7000 persons.

—Moody and Sankey's protracted labors in Chicago have been concluded. They estimate that about 8,000 converts were made as the result of the effort.

—An Iowa Spiritualist recently attempted to demonstrate his alleged ability to raise the dead by a practical trial. It is needless to add that the experiment was not a success.

—The Jews are returning to Jerusalem in such numbers that the Jewish population of the city has doubled in the last ten years. Most of them are from Russia.

—John Keboe, the leader of the Molly Maguires who practiced the most heartless atrocities for several years, has been convicted of murder in the first degree.

—The Eastern Question is still unsettled. Turkey refused to accede to the proposal of the powers; but Russia has not declared war as it was expected she would do.

—One ton (2,000 pounds avordupois) of gold or silver contains 29,163 troy ounces, and, therefore, the value of a ton of pure gold is \$602,799.21, and of a ton of silver \$37,704.84.

—A boy recently died in England who weighed 350 pounds. He was twelve years and four months old, was five feet high, and measured nearly six feet around the waist.

—A duel was recently fought between James Gordon Bennett, nominal editor of the New York *Herald*, and a Mr. May who had assaulted him on the street. No one was hurt.

—An official dispatch from India states that the suffering from famine is still on the increase, and that it will continue to increase for several months. More than 6,000,000 people are affected by it.

—A new prison for women now in process of erection at South Framingham, Mass., is to be managed entirely by women. The engineer

and fireman are to be the only men about the institution.

—We are to have a new three-cent postage-stamp of a different color. The old color, green, is found to be too convenient for the "stamp-washers" for the profit of the government.

—A plumber in Cincinnati who recently sent an exorbitant bill to a man who had employed him was punished by a suit for damage resulting from bad plumbing, which resulted in a judgment against him of \$2,000.

—Hildesheim Cathedral is famous for supporting upon one of its walls the branches of the oldest rose-bush known. It is one thousand years old, and its main stem is a foot thick. It annually produces an immense crop of roses.

—A wagon-load of nitro-glycerine, some 600 pounds, exploded about three-quarters of a mile from Petrolia, Pa., tearing the wagon and horses to shreds, and blowing to atoms two men who were unloading the wagon.

—The pine-apple is cultivated extensively in the East Indies, where the leaves are converted into a kind of wadding, used for upholstering purposes instead of hair, and into a sort of flannel, of which substantial shirts and coats are made.

—The remains of a balloon have recently been found on the coast of Iceland. In the car were human bones—an incomplete skeleton—and a leather traveling-bag containing papers so moldy as not to be deciphered. It is conjectured that this was the balloon in which the aeronaut Price ascended during the siege of Paris.

—Commodore Vanderbilt, whose demise has been almost daily expected for some time, died Jan. 4, at the advanced age of 83 years. He was an unusually active and successful business man, having amassed during his lifetime a fortune estimated at more than \$85,000,000. It is stated that in his will he devoted none of this enormous wealth to charitable purposes.

—A Reform Club has recently been organized in this city. It already numbers among its members many of the most notorious drinkers of the city, and promises to do an excellent work of reform in this direction. They have established a reading-room, where our health publications may be found, and hold weekly meetings for the encouragement of the members and the reception of new converts to temperance. Such a club in every city would be the means of much good.

—Just after our last issue went to press, a terrible railroad accident occurred at Ashtabula, Ohio, in which a train was precipitated from a high bridge down into a deep gulf. The wreck immediately took fire and burned up before assistance could be rendered. There were nearly 200 persons on the train, of whom only 73 escaped with their lives, though seriously injured; 83 of the remainder were entirely consumed by the flames. P. P. Bliss, the eminent musical composer, with his wife, were among the victims.



## Literary Notices.

### REPORT OF MICHIGAN STATE BOARD OF HEALTH for 1876. Lansing, Mich.

The report is embodied in a neat volume of nearly 200 pp., and gives internal evidence of the performance of a vast amount of labor both by the Board as a whole and as individuals. The secretary of the Board, Dr. H. B. Baker, who is also superintendent of Vital Statistics in Michigan, is evidently an indefatigable worker in the cause of public health. The report contains a number of very valuable, interesting papers on various practical subjects.

### TEN CENTS. By Mary Dwinell Chellis. New York : National Temperance Society.

No other publishing house in America has done so much as that of the National Temperance to create a temperance literature for the young. Under the able management of Mr. J. N. Stearns, a large number of elegant volumes have been prepared by talented authors, and are well adapted for Sunday-school and other libraries for the young. The present volume is an interesting one, and impresses well some of the cardinal principles of temperance and morality.

### REPORT ON THE DEATH-RATE OF EACH SEX IN MICHIGAN. By H. B. Baker, M. D. Cambridge : Riverside Press.

This is a neat little pamphlet, and a very valuable contribution to sanitary science. Dr. Baker is an indefatigable worker, and the report before us is ample evidence of his industry and zeal in the cause of public health. As secretary of the State Board of Health, Dr. Baker has rendered the State of Michigan a great amount of valuable service which is perhaps not as fully appreciated as it might be by the people of this commonwealth.

### MICRO-PHOTOGRAPHS IN HISTOLOGY. By Carl Seiler, M. D. Philadelphia.

This unique journal still continues its regular monthly visits, and we begin to hope that it may be made a financial success by energetic "pushing." The present number contains views of muscular fibers, striated and non-striated, the ultimate fibrils of an insect, and an incapsulated trichina. These views are not, of course, in any degree equal to those which are obtained with the microscope itself; but they will greatly aid the student to get a much more accurate idea of the real structure of living tissues than he can obtain from the diagrammatic representations of the books. The plate representing involuntary muscular fibers in the present number is the poorest we have yet seen.

### AUTOBIOGRAPHY OF A VEGETARIAN. Reported by C. O. Groom Napier. Bath, Eng. : Phonetic Institute.

This little tract is a reprint of an article which appeared in *Frazer's Magazine*, July, 1876. It was copied into the *New York Tribune*, and thence into several other American journals. The tract is printed in phonetic characters. It is a very interesting account of the successful career of a gentleman who at first adopted a vegetarian diet on account of its economy, and afterward adhered to it from being convinced that his health was improved by so doing. It is a valuable testimony in favor of vegetarianism.

## SEASONING.

—The few who are still earnest advocates of the theory that lager-beer does not intoxicate still cling fondly to the good old custom of winding the clock at two A. M. with a hair-brush.

—A fourteen-year-old boy has quit learning to smoke on reading the assertion of a physician that it interferes with the molecular changes coincident with the development of the tissues, and makes the blood corpuscles oval and irregular at the edges.

—"Where did this baby come from?" asked a little three-year-old girl of the nurse, who was washing the squealing little stranger. "Why, from Heaven, of course," replied the nurse. "Well, if it screamed like that there, I don't wonder they sent it off," was the stunning rejoinder.


—"What a strain that is!" said Mrs. Partington, as she heard an air from Lucia sung in the highest style by a young lady where she was visiting. "Yes," was the response; "it is operatic." "Upper attic, is it?" questioned she. "I should think it was high enough to be on top of the house."


—When you meet a man who comes down in the morning and kicks the cat over the table, cuffs two of the children, and remarks that he should think from the appearance of the breakfast that the cook was drunk, do not think harshly of him. He is probably the person who sings "Home, sweet home" so affecting at evening parties.

**Mixed.**—An inquisitive boy who had been taught to believe in the resurrection of the identical atoms which constituted each individual during life, said to his mother: "Ma, will all the heathens turn up when it comes resurrection times?" "Yes, my son." "And then, missionaries; will those turn up?" "Certainly, my son." "Well, when them cannibal heathens what's feedin' on missionaries get resurrected, and them missionaries what's been eat comes around and wants to get resurrected, things is goin' to be worse mixed than the presidential election, hey, ma?" "It is time you were to bed, my son."



## Items for the Month.

 A BLUE CROSS by this paragraph signifies that the subscription has expired, and that this number is the last that will be sent till the subscription is renewed. A renewal is earnestly solicited.

 Canvassers are doing well. Many complain of the hard times, but the fact that the times are hard furnishes another argument to use in urging economy. A gentleman writes us that the REFORMER has saved him \$100 a year during the five years since he subscribed for it. To do without it would be a loss to him of \$100 a year, or \$500 in five years. In a few years, the annual saving would amount to enough to buy a good farm. No family can afford to be without some sort of a monitor to remind them at least once a month of their duty to look after the interests of their health. This is what the REFORMER will do, if you will give it a chance.


### A New Work.

"PLAIN FACTS ABOUT SEXUAL LIFE" is the title of a new work which we are now putting through the press, and expect to be able to place in the hands of agents in a very few weeks. The scope of the work will be best indicated by a few of the main section heads.

The first section considers life and reproduction in general, describing the various modes of generation illustrated by the various classes of plants and animals, from the lowest living forms to the highest. The anatomy and physiology of reproduction in man is fully described.

Use and Abuse, Continence, Chastity, Marital Excesses, The Social Evil, Fœticide and Abortion, and Prevention of Conception, are the headings of chapters which consider in a very thorough manner the various questions relating to those subjects. The concluding section considers the subject of Solitary Vice, its results, and its treatment.


This work has been prepared to meet a long-existing want, and a very rapid sale is anticipated. It is being printed on finely tinted, super-calendered paper, and will be tastefully bound in cloth, making a handsome volume of 352 pp. Orders received first will receive first attention. Price, post-paid, \$1.25.

 Notwithstanding the hard times, the promptness with which subscribers are renewing their subscriptions has never been excelled. It is also very encouraging to notice that together with their cash remittances, our patrons are pouring in their letters of commendation of the REFORMER, and appreciation of its work, in a manner entirely unprecedented. We thank our friends, one and all, for their encouraging words, and still more substantial support; and we feel certain that if they were pleased with

the journal during the year 1876, they will be doubly pleased with it during the present year, since we have the aid of so many able contributors. This noble cause is progressing, and the REFORMER is glad to have a part in it.

THE ALMANAC is this year reaching a circulation altogether beyond the most sanguine expectations of its publishers when the first edition was issued. Letters are daily received at this Office which testify to the good results arising from its circulation.

The demand for the Almanac upon the Pacific Coast was so great that it was found expedient that an edition should be printed especially for California and adjacent States and Territories. This edition has been printed by the *Signs of the Times* Office, Oakland, Cal., and might be pronounced a *fac simile* of the Eastern edition did it not contain a few local advertisements, a page or two of new matter of special interest to the Pacific Coast, and several changes in the monthly sanitary hints which were necessary to adapt it to the climate of that region. The typographical appearance is fully equal to the general edition published here, and does credit to the *Signs* Office. The sales are unexpectedly large.

 The hard times and the hard winter have together compelled a large number of the smaller health institutions in the country to close their doors for want of patients. The best institutions continue to flourish, however, and as will be seen in our advertising columns, offer the most excellent facilities for treatment to invalids of all classes. We have not recently heard from Drs. Heald and Hurd, but they were doing well at last accounts. The Health Institute at this place has nearly double the usual number of patients at this season of the year. This is probably owing to recent improvements and to the fact that the present winter has been an unusually favorable one for treatment.

PRESS NOTICES OF "ALCOHOLIC POISON."—This recent work is receiving a very kindly reception from the Press wherever it has been brought to the attention of journals in favor of temperance. The following is a sample:—

"'Alcoholic Poison' is the title of a substantial pamphlet sent by the HEALTH REFORMER of Battle Creek, Mich. It is somewhat radical and positive in its statements, going over the entire ground in a very vigorous and readable manner. The positions, which are bold enough to satisfy the most radical, are fortified with the utterances of standard authors in medical science, and by facts in great number and variety, and we do not see how any one can sit down and read it without having a new and deep impression made on his mind, of the enormous evils resulting from the use of alcoholic stimulus."—*St. Johnsbury (Vt.) News*.



## OUR BOOK LIST.

The following books, published at this Office, will be furnished by mail, post-paid, at the prices given. By the quantity, they will be delivered at the express or R. R. freight offices at one-third discount, for cash. SPECIAL TERMS TO AGENTS.

**Hygienic Family Physician.** "A complete guide for the preservation of health and the treatment of disease without the use of medicine." Bound in cloth, 500 pp. Price, \$1.00.

**Uses of Water in Health and Disease.** This work comprises a sketch of the history of bathing, an explanation of the properties and effects of water, a description of all the different kinds of baths, and directions for applying water as a remedy for disease. Price, 20 cents. Bound in cloth, 50 cts.

**Proper Diet for Man.** A concise summary of the principal evidences which prove that the natural and proper food for man consists of fruits, grains, and vegetables. Pamphlet. Price, 15 cents.

**The Evils of Fashionable Dress,** and how to dress healthfully. Price, 10 cents.

**Alcoholic Poison,** as a beverage and as a medicine. An exposure of the fallacies of alcoholic medication, moderate drinking, and of the pretended Biblical support of the use of wine. 20 cts.

**Health and Diseases of Woman.** By R. T. TRALL, M. D. Price, 15 cts.

**The Hygienic System.** By R. T. Trall, M. D. Price, 15 cents.

**Tobacco-Using.** By R. T. Trall, M. D. 15 cts.

**Healthful Cookery.** A Hand-Book of Food and Diet; or What to Eat, How to Eat, When to Eat. The most complete work on Hygienic Cookery published. Price, 25 cents.

**Science of Human Life.** This is a valuable pamphlet, containing three of the most important of Graham's Lectures on the Science of Human Life. Price, 30 cents.

**Health Tracts.** The following tracts are put up in a neat package and aggregate, in all, nearly 250 pp.: Dyspepsia; Healthful Clothing; Principles of Health Reform; Startling Facts about Tobacco; Twenty-five Arguments for Tobacco-Using Briefly Answered; Tea and Coffee; Pork; True Temperance; Alcohol: What is it? Alcoholic Poison; Moral and Social Effects of Alcohol; Cause and Cure of Intemperance; The Drunkard's Arguments Answered; Alcoholic Medication; Wine and the Bible. Price, 30 cents per package.

These tracts will be furnished, postage paid, at the rate of 800 pages for \$1.00. A liberal discount by the quantity.

**The Health Reformer.** A monthly journal for the household. \$1.00 a year. Specimen copies sent free.

**Bound Volumes of the Health Reformer,** \$1.50 each.

Address, **HEALTH REFORMER,**

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## PROSPECTUS OF

## "The Health Reformer,"

— FOR 1877. —

A MONTHLY JOURNAL,

DEVOTED TO

PHYSICAL, MENTAL, AND MORAL CULTURE.

THOUSANDS die every year through ignorant neglect of those laws which govern *Physical, Mental, and Moral* health. Hundreds of thousands suffer weeks and months from sickness, from the same cause. To teach and illustrate these laws, in their various relations and applications, is the mission of the *HEALTH REFORMER*. The following is a brief summary of the principles advocated:—

**OUR CREED.**—The laws of life and health are the laws of God. Christianity is practical piety. Do right from love of right and truth. Love God supremely, your neighbor equally. "For forms of faith, let wrangling bigots fight."

**HYGIENE.**—Obedience to all the laws of health is necessary to secure a "sound mind in a sound body." Perfect mental and moral health is promoted by physical health.

**DISEASE.**—Sickness is Nature's punishment for Physical sin, or violation of physical law, as moral depravity is the result of moral sin, or transgression of moral law. Men shorten their own lives, not Providence, by their own reckless or thoughtless disregard of the laws of life and health respecting eating, drinking, breathing, sleeping, and all other acts of life.

**DRUGS.**—Dr. Oliver Wendell Holmes says it would be "better for mankind if all the medicines of the drug shops were cast into the sea." Drugs and poisons are too often used when they do more harm than good. Nature's remedies are far superior, in most cases.

**TRUE TEMPERANCE PLATFORM.**—Temperance reform, to be thorough, genuine, and efficient, must begin with reform in diet. All stimulants must be discarded—alcohol, opium, hashish, absinthe, tobacco, and the rest.

### The Health Reformer for 1877

Will contain a great variety of practical information on general health questions, food and diet, how to recover health, etc. In addition, it will contain more or less of general literature, a Scientific and a News Department. The People's Department, including answers to correspondents, is a valuable feature. Hints for Farm and Household will be found of great practical value to thousands.

Comparison of the reports of different publishers shows that the *HEALTH REFORMER* has the largest circulation of any Health Journal published in America, and probably in the world.

**TERMS:** \$1.00 a Year, in Advance.

*Specimen Copies Sent Free.*

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